

II. Projects Funded Preceding Biennium

“a description of each project receiving money from the trust fund during the preceding biennium;”

The following documents include:

- Summaries and descriptions of the adopted appropriations for projects funded in FY2021 (beginning July 1, 2021).
 - Research projects have been marked as such in the description.
 - Full work plans are available at the LCCMR, Room 65, State Office Building and on the LCCMR website <http://www.lccmr.mn.gov/> (click on the tab titled “Projects Funded”).
- Summaries and descriptions of the adopted appropriations for projects funded in FY2022 (beginning July 1, 2021).
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- Summaries and descriptions of the adopted appropriations for projects funded in FY2023 (beginning July 1, 2022).
 - Research projects have been marked as such in the description.
 - Full work plans are available at the LCCMR, Room 65, State Office Building and on the LCCMR website <http://www.lccmr.mn.gov/> (click on the tab titled “Projects Funded”).
- Legal Citations
 - FY2021 - M.L. 2021, First Special Session, Chapter 6, Article 5, Sec. 2 (86 projects for a total of \$65,319,000 - \$61,387,000 FY21 ENRTF and transfers from FY16 \$100,000, FY17 \$430,000, FY18 \$94,000, FY19 \$540,000 and FY20 \$2,768,000)
 - FY2022 - M.L. 2021, First Special Session, Chapter 6, Article 6, Sec. 2 (89 projects for a total of \$71,721,000 - \$70,881,000 FY23 ENRTF and transfers from FY18 \$270,000, FY19 \$350,000 and FY20 \$200,000)
 - FY2023 - M.L. 2022, Chapter 94, Sec. 2 (80 projects for a total of \$73,344,000 - \$70,881,000 FY23 ENRTF and transfers from FY18 \$1,835,000, FY19 \$550,000 and FY22 \$78,000)

**FY2021 - MN Laws 2021, First Special Session,
Chapter 6, Article 5, Section 2**

M.L. 2021 (2020 RFP) Environment and Natural Resources Trust Fund (ENRTF) Tentative Recommendations by Subdivision

Process for M.L. 2020

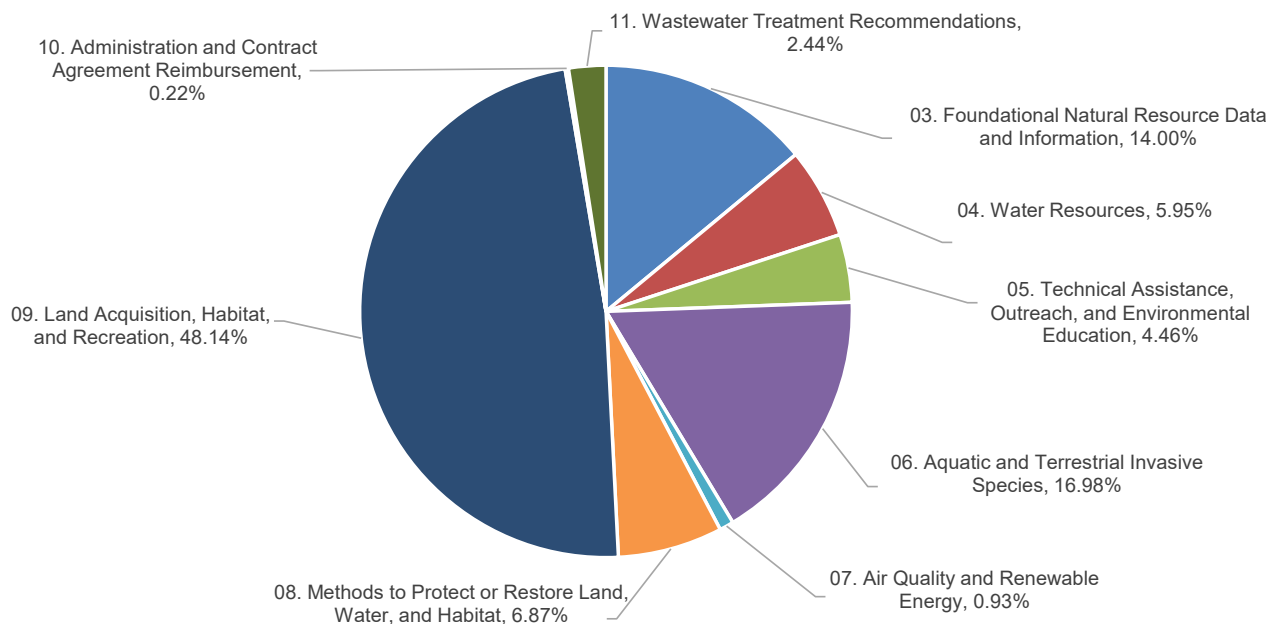
For the FY2020 and FY2021 biennium, approximately \$61 million is available each year for funding from the Environment and Natural Resources Trust Fund (ENRTF). As of July 17, 2019, the Legislative Citizen Commission on Minnesota Resources (LCCMR) has tentatively selected through simple majority 77 projects totaling \$61,387,000 to recommend to the 2020 Minnesota Legislature for funding from the ENRTF. A final decision on recommendations is pending. In response to LCCMR's 2020 Request for Proposal (RFP), 290 proposals requesting a total of approximately \$203 million were received and considered through a competitive, multi stage evaluation. The following tentative recommendations range from funding the full proposal and dollar amount requested to partial funding for specific proposal elements.

January 3, 2019	2020 RFP Issued
April 15, 2019	2020 RFP Proposal Deadline (Received 290 Proposals totaling approximately \$203 million)
June 5-6, 2019	2020 Selection of Proposals for Presentations
June 17 & 24-27, 2019	2020 Proposal Presentations
July 17-18, 2019	2020 Allocation Recommendations
August - December, 2019	Recommended Research Projects Undergo Peer Review
January 16 & 30, 2020	2020 Appropriation Language Review & for possible Adoption

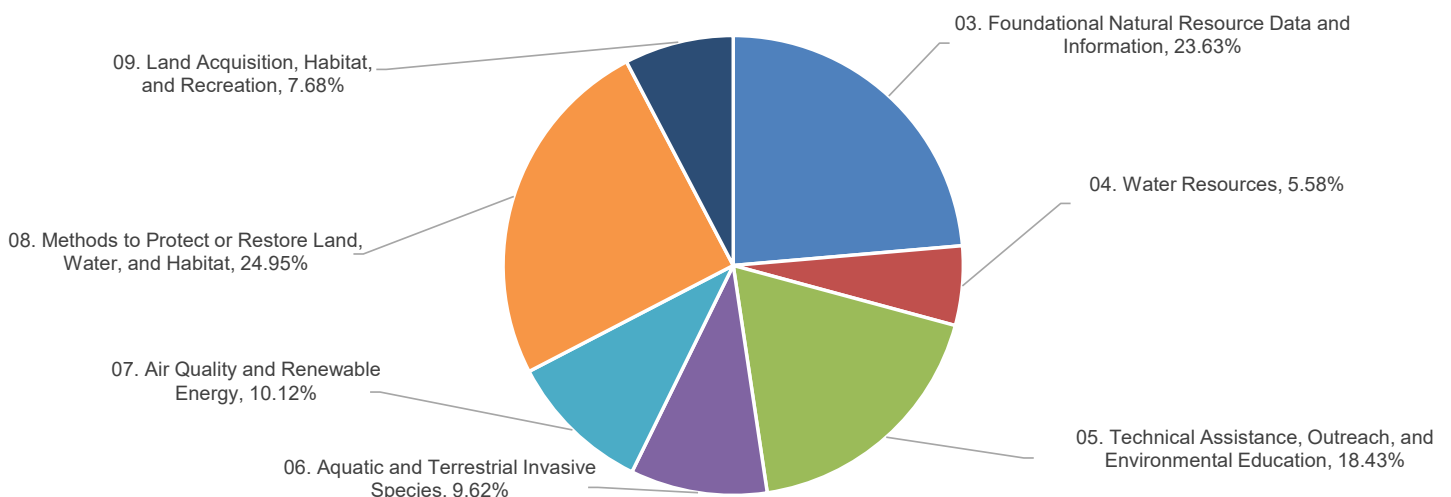
Summary of Recommendations by Subdivision

Subdivision	\$ Recommended	\$ Percent	# Recommended	# Percent
03. Foundational Natural Resource Data and Information	\$8,593,000	14.00%	15	19.48%
04. Water Resources	\$3,653,000	5.95%	8	10.39%
05. Technical Assistance, Outreach, and Environmental Education	\$2,738,000	4.46%	9	11.69%
06. Aquatic and Terrestrial Invasive Species	\$10,425,000	16.98%	7	9.09%
07. Air Quality and Renewable Energy	\$573,000	0.93%	3	3.90%
08. Methods to Protect or Restore Land, Water, and Habitat	\$4,219,000	6.87%	12	15.58%
09. Land Acquisition, Habitat, and Recreation	\$29,551,000	48.14%	21	27.27%
10. Administration and Contract Agreement Reimbursement	\$135,000	0.22%	1	1.30%
11. Wastewater Treatment Recommendations	\$1,500,000	2.44%	1	1.30%
TOTAL RECOMMENDATIONS	\$61,387,000	100%	77	100%

% of Total \$ Recommended by Subdivision



% of Total \$ Recommended In Category H by Subdivision

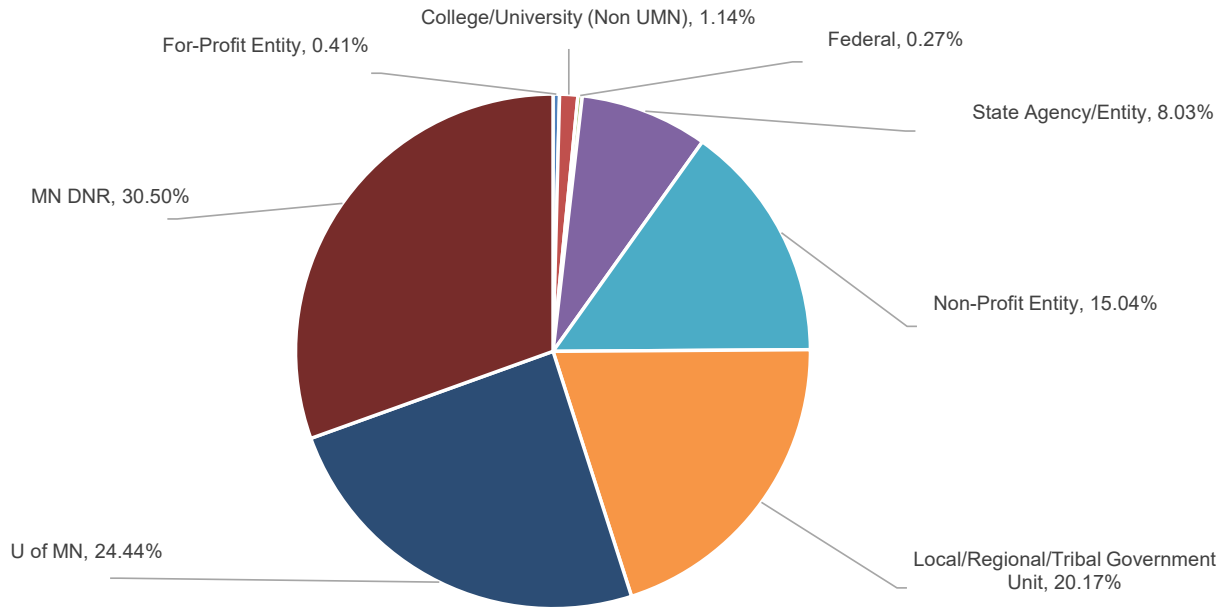


M.L. 2020 ENRTF TENTATIVE RECOMMENDATIONS BY AFFILIATION AND AREA OF IMPACT

Summary of Recommendations by Proposer Affiliation

Affiliation Type by Proposer Affiliation	\$ Recommended	\$ Percent	# Recommended	# Percent
For-Profit Entity	\$250,000	0.41%	1	1.30%
College/University (Non UMN)	\$700,000	1.14%	1	1.30%
Federal	\$168,000	0.27%	1	1.30%
State Agency/Entity	\$4,930,000	8.03%	6	7.79%
Non-Profit Entity	\$9,235,000	15.04%	19	24.68%
Local/Regional/Tribal Government Unit	\$12,382,000	20.17%	12	15.58%
U of MN	\$15,002,000	24.44%	24	31.17%
MN DNR	\$18,720,000	30.50%	13	16.88%
TOTAL RECOMMENDATIONS	\$61,387,000	100.00%	77	100.00%

% of Total \$ Recommended by Affiliation



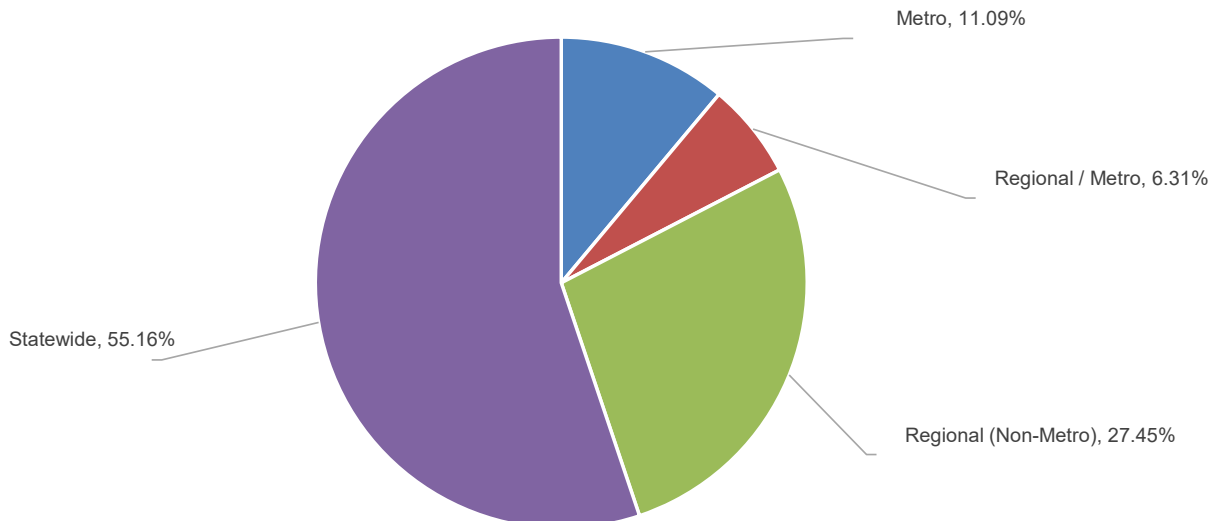
Summary of Recommendations by Area of Impact

Area of Impact	\$ Recommended	\$ Percent	# Recommended	# Percent
Metro*	\$6,806,000	11.09%	8	10.39%
Metro*/Regional**	\$3,873,000	6.31%	7	9.09%
Regional**	\$16,850,000	27.45%	25	32.47%
Statewide	\$33,858,000	55.16%	37	48.05%
TOTAL RECOMMENDATIONS	\$61,387,000	100.00%	77	100.00%

* "Metro" region includes the 11 counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright.

** "Regional" means area of impact is less than "Statewide" but includes one or more regions of the state ("Northwest", "Northeast", "Central", "Southwest", or "Southeast") other than the 11-county "Metro" region.

% Total \$ Recommended by Area of Impact



**M.L. 2021 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for RFP 2020/FY 2021**

On June 25, 2021, the Legislature adopted 74 LCCMR recommendations as tentatively recommended in 2020, provided additional funds to one tentative recommendation, reduced funds for one tentative recommendation, and modified one other. They also added 9 additional appropriations, primarily using unspent funds from prior appropriations that would otherwise return to the Trust Fund, totaling \$3932,000. On June 29, 2021, 86 appropriations were signed into law by the Governor as M.L. 2021, First Special Session, Chapter 6, Article 5, with \$61,387,000 from FY21 and \$3,932,000 recaptured from prior fiscal years, for \$65,319,000 total appropriations.

Topic Area	Total LCCMR \$ Appropriated	Multiple FY's Reallocated \$	FY2021 Trust Fund \$	Percentage of Total Appropriations
Subd. 03 Foundational Natural Resource Data and Information 15 Appropriations	\$8,593,000	\$0	\$8,593,000	13.16%
Subd. 04 Water Resources 7 Appropriations	\$3,457,000	\$0	\$3,457,000	5.29%
Subd. 05 Technical Assistance, Outreach, and Environmental Education 10 Appropriations	\$2,871,000	\$0	\$2,871,000	4.40%
Subd. 06 Aquatic and Terrestrial Invasive Species 7 Appropriations	\$10,425,000	\$0	\$10,425,000	15.96%
Subd. 07 Air Quality and Renewable Energy 3 Appropriations	\$573,000	\$0	\$573,000	0.88%
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat 13 Appropriations	\$4,337,000	\$0	\$4,337,000	6.64%
Subd. 09 Land Acquisition, Habitat, and Recreation 22 Appropriations	\$29,901,000	\$0	\$29,901,000	45.78%
Subd. 10 Emerging Issues Account; Wastewater Renewable Energy Demonstration Grants 1 Appropriation	\$1,095,000	\$0	\$1,095,000	1.68%
Subd. 11 Contract Agreement Reimbursement 1 Appropriation	\$135,000	\$0	\$135,000	0.21%
Subd. 20 Transfers 7 Appropriations (amounts are estimate)	\$3,932,000	\$3,932,000	\$0	6.02%
Total Appropriations	\$65,319,000	\$3,932,000	\$61,387,000	100.00%

Fund Source	\$ Amount
FY 2021 - Environment and Natural Resources Trust Fund (ENRTF)	\$61,387,000
ENRTF Dollars Reallocated from 2019 Appropriations (FY20)	\$2,768,000
ENRTF Dollars Reallocated from 2018 Appropriations (FY19)- estimate	\$540,000
ENRTF Dollars Reallocated from 2017 Appropriations (FY18)- estimate	\$94,000
ENRTF Dollars Reallocated from 2016 Appropriations (FY17)- estimate	\$430,000
ENRTF Dollars Reallocated from 2015 Appropriations (FY16)- estimate	\$100,000
Total \$	\$65,319,000

2020 (FY21) Environment and Natural Resources Trsut Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2021	TOTAL ENRTF \$ Appropriated	Region*
Subd. 03 Foundational Natural Resource Data and Information (15 Projects - Subtotal = \$8,593,000)								
03a	2020-074	Geologic Atlases for Water Resource Management	U of MN - Minnesota Geological Survey	Barbara Lusardi	\$ -	\$ 2,000,000	\$ 2,000,000	Statewide
03b	2020-023	Expanding Minnesota Ecological Monitoring Network	MN DNR	Erika Rowe	\$ -	\$ 800,000	\$ 800,000	Statewide
03c	2020-009	County Groundwater Atlas	MN DNR	Paul Putzier	\$ -	\$ 1,125,000	\$ 1,125,000	Statewide
03d	2020-026	Foundational Hydrology Data for Wetland Protection and Restoration	MN DNR	Jennie Skancke	\$ -	\$ 400,000	\$ 400,000	Statewide
03e	2020-067	Voyageurs Wolf Project – Phase II	U of MN	Joseph Bump	\$ -	\$ 575,000	\$ 575,000	NE
03f	2020-025	Expanding Restoration and Promoting Awareness of Native Mussels	Minnesota Zoological Society	Seth Stapleton	\$ -	\$ 489,000	\$ 489,000	Statewide
03g	2020-032	Improving Pollinator Conservation by Revealing Habitat Needs	U of MN	Colleen Satyshur	\$ -	\$ 500,000	\$ 500,000	Statewide
03h	2020-003	Bee Minnesota - Protect Our Native Bumblebees	U of MN	Declan Schroeder	\$ -	\$ 650,000	\$ 650,000	Statewide
03i	2020-005	Bobcat and Fisher Habitat Use and Interactions	U of MN	Michael Joyce	\$ -	\$ 400,000	\$ 400,000	Central, Metro, NW, NE
03j	2020-030	Healthy Prairies III: Restoring Minnesota Prairie Plant Diversity	U of MN	Ruth Shaw	\$ -	\$ 500,000	\$ 500,000	Central, Metro, NW, SW, SE
03k	2020-027	Freshwater Sponges and AIS: Engaging Citizen Scientists	U of MN	Venugopal Mukku	\$ -	\$ 400,000	\$ 400,000	Statewide
03l	2020-016	Do Beavers Buffer Against Droughts and Floods?	Voyageurs National Park	Steve Windels	\$ -	\$ 168,000	\$ 168,000	NE
03m	2020-022	Enhancing Bat Recovery by Optimizing Artificial Roost Structures	MN DNR	Ed Quinn	\$ -	\$ 190,000	\$ 190,000	Statewide
03n	2020-064	Tools for Supporting Healthy Ecosystems and Pollinators	MN DNR	Jessica Petersen	\$ -	\$ 198,000	\$ 198,000	Statewide
03o	2020-007	Conserving Black Terns and Forster's Terns in Minnesota	U of MN - Duluth NRRI	Annie Bracey	\$ -	\$ 198,000	\$ 198,000	Statewide
Subd. 03 Foundational Natural Resource Data and Information Subtotal =					\$ -	\$ 8,593,000	\$ 8,593,000	
Subd. 04 Water Resources (7 Projects - Subtotal = \$3,457,000)								
04a	2020-037	Managing Highly Saline Waste from Municipal Water Treatment	U of MN	Natasha Wright	\$ -	\$ 250,000	\$ 250,000	Statewide

2020 (FY21) Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2021	TOTAL ENRTF \$ Appropriated	Region*
04b	2020-062	Technology for Energy-Generating On-site Industrial Wastewater Treatment	U of MN	Paige Novak	\$ -	\$ 450,000	\$ 450,000	Statewide
04c	2020-040	Microplastics: Transporters of Contaminants in Minnesota Waters	U of MN	Lee Penn	\$ -	\$ 425,000	\$ 425,000	Statewide
04d	2020-013	Developing Strategies to Manage PFAS in Land-Applied Biosolids	Minnesota Pollution Control Agency	Summer Streets	\$ -	\$ 1,404,000	\$ 1,404,000	Statewide
04e	2020-055	Quantifying New Urban Precipitation and Water Reality	U of MN	Joe Magner	\$ -	\$ 500,000	\$ 500,000	Statewide
04f	2020-034	Innovative Solution for Protecting Minnesota from PFAS Contamination	Dem-Con	Bill Keegan	\$ -	\$ 250,000	\$ 250,000	Metro
04g	2020-024	Expanding Protection of Minnesota Water through Industrial Conservation	U of MN	Laura Babcock	\$ -	\$ 178,000	\$ 178,000	Statewide
Subd. 04 Water Resources Subtotal =					\$ -	\$ 3,457,000	\$ 3,457,000	
Subd. 05 Technical Assistance, Outreach, and Environmental Education (10 Projects - Subtotal = \$2,871,000)								
05a	2020-059	Statewide Environmental Education via Public Television Outdoor Series	Pioneer Public Television	Cindy Dorn	\$ -	\$ 300,000	\$ 300,000	Statewide
05b	2020-041	Minnesota Freshwater Quest: Environmental Education on State Waterways	Wilderness Inquiry	Julie Edmiston	\$ -	\$ 500,000	\$ 500,000	Statewide
05c	2020-061	Teach Science: Schools as STEM Living Laboratories	Climate Generation: A Will Steger Legacy	Kristen Poppleton	\$ -	\$ 250,000	\$ 250,000	Statewide
05d	2020-038	Mentoring Next Generation of Conservation Professionals	Minnesota Valley National Wildlife Refuge Trust, Inc.	Deborah Loon	\$ -	\$ 500,000	\$ 500,000	Central, Metro, SE
05e	2020-036	Jay C. Hormel Nature Center Supplemental Teaching Staff	City of Austin	Luke Reese	\$ -	\$ 225,000	\$ 225,000	SE
05f	2020-001	375 Underserved Youth Learn Minnesota Ecosystems by Canoe	YMCA of the Greater Twin Cities	Kurt Simer	\$ -	\$ 375,000	\$ 375,000	Metro, NE
05g	2020-069	YES! Students Take on Water Quality Challenge Phase II	Prairie Woods Environmental Learning Center	Shelli-Kae Foster	\$ -	\$ 199,000	\$ 199,000	Statewide
05h	2020-021	Engaging Minnesotans with Phenology: Radio, Podcasts, Citizen Science	Northern Community Radio, Inc.	Maggie Montgomery	\$ -	\$ 198,000	\$ 198,000	Statewide
05i	2020-017	Driving Conservation Behavior for Native Mussels and Water Quality	Minnesota Zoo	Carol Strecker	\$ -	\$ 191,000	\$ 191,000	Statewide

2020 (FY21) Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2021	TOTAL ENRTF \$ Appropriated	Region*
05j	2020-079	Workshops and Outreach to Protect Raptors from Lead Poisoning	U of MN	Julia Ponder	\$ -	\$ 133,000	\$ 133,000	Statewide
Subd. 05 Technical Assistance, Outreach, and Environmental Education Subtotal =					\$ -	\$ 2,871,000	\$ 2,871,000	
Subd. 06 Aquatic and Terrestrial Invasive Species (7 Projects - Subtotal = \$10,425,000)								
06a	2020-043	Minnesota Invasive Terrestrial Plants and Pests Center (MITPPC) - Phase V	U of MN - MITPPC	Robert Venette	\$ -	\$ 5,000,000	\$ 5,000,000	Statewide
06b	2020-054	Protect Community Forests by Managing Ash for Emerald Ash Borer	MN DNR	Valerie McClannahan		\$ 3,500,000	\$ 3,500,000	Statewide
06c	2020-004	Biological Control of White-Nose Syndrome in Bats - Phase III	U of MN	Christine Salomon	\$ -	\$ 440,000	\$ 440,000	Statewide
06d	2020-002	Applying New Tools and Techniques Against Invasive Carp	MN DNR	Brian Nerbonne	\$ -	\$ 478,000	\$ 478,000	Central, SW
06e	2020-020	Emerald Ash Borer and Black Ash: Maintaining Forests and Benefits	U of MN	Alexis Grinde	\$ -	\$ 700,000	\$ 700,000	Statewide
06f	2020-063	Testing Effectiveness of Aquatic Invasive Species Removal Methods	U of MN - Duluth NRRI	Valerie Brady	\$ -	\$ 110,000	\$ 110,000	Statewide
06g	2020-035	Invasive <i>Didymosphenia</i> Threatens North Shore Streams	Science Museum of Minnesota	Mark Edlund	\$ -	\$ 197,000	\$ 197,000	NE
Subd. 06 Aquatic and Terrestrial Invasive Species Subtotal =					\$ -	\$ 10,425,000	\$ 10,425,000	
Subd. 07 Air Quality and Renewable Energy (3 Projects - Subtotal = \$573,000)								
07a	2020-073	Storing Renewable Energy in Flow Battery for Grid Use	U of MN - Morris	Bryan Herrmann	\$ -	\$ 250,000	\$ 250,000	Central
07b	2020-018	Eco-Friendly Plastics from Cloquet Pulp-Mill Lignin	U of MN	Simo Sarkanen	\$ -	\$ 193,000	\$ 193,000	Central, NW, NE
07c	2020-014	Diverting Unsold Food from Landfills and Reducing Greenhouse Gases	Second Harvest Heartland	Julie Vanhove	\$ -	\$ 130,000	\$ 130,000	Metro
Subd. 07 Air Quality and Renewable Energy Subtotal =					\$ -	\$ 573,000	\$ 573,000	
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat (13 Projects - Subtotal = \$4,337,000)								
08a	2020-050	Pollinator Central: Habitat Improvement with Citizen Monitoring	Great River Greening	Rebecca Tucker	\$ -	\$ 750,000	\$ 750,000	Central, Metro
08b	2020-071	Pollinator and Beneficial Insect Strategic Habitat Program	MN Board of Water and Soil Resources	Dan Shaw	\$ -	\$ 750,000	\$ 750,000	Statewide

2020 (FY21) Environment and Natural Resources Trsut Fund (ENRTF) Appropriations

M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2

7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2021	TOTAL ENRTF \$ Appropriated	Region*
08c	2020-077	Lignin-Coated Fertilizers for Phosphate Control	U of MN - Duluth NRRI	Eric Singaas	\$ -	\$ 250,000	\$ 250,000	Statewide
08d	2020-031	Implementing Hemp Crop Rotation to Improve Water Quality	Central Lakes College	Keith Olander	\$ -	\$ 700,000	\$ 700,000	Central, Metro, SW
08e	2020-012	Developing Cover-Crop Systems for Sugar Beet Production	U of MN	Anna Cates	\$ -	\$ 300,000	\$ 300,000	Central, NW
08f	2020-047	Native Eastern Larch Beetle Decimating Minnesota's Tamarack Forests	U of MN	Brian Aukema	\$ -	\$ 398,000	\$ 398,000	Central, Metro, NW, NE
08g	2020-029	Habitat Associations of Mississippi Bottomland Forest Marsh Birds	Audubon Minnesota	Rob Schultz	\$ -	\$ 275,000	\$ 275,000	SE
08h	2020-048	Peatland Restoration in the Lost River State Forest	Roseau River Watershed District	Torin McCormack	\$ -	\$ 135,000	\$ 135,000	NW
08i	2020-052	Prescribed Burning for Brushland-Dependent Species - Phase II	U of MN	Rebecca Montgomery	\$ -	\$ 147,000	\$ 147,000	NE
08j	2020-051	Pollinator Habitat Creation Along Urban Mississippi River	Friends of the Mississippi River	Lisa Mueller	\$ -	\$ 129,000	\$ 129,000	Metro
08k	2020-033	Increase Golden Shiner Production to Protect Aquatic Communities	U of MN - Duluth - Sea Grant	Amy Schrank	\$ -	\$ 188,000	\$ 188,000	Statewide
08l	2020-078	Restoring Turf to Native Pollinator Gardens Across Metro	Wilderness in the City	Holly Jenkins	\$ -	\$ 197,000	\$ 197,000	Metro
08m	2020-076	Lawns to Legumes (combined with Subd. 20b +\$880,000)	BWSR	Dan Shaw	\$ -	\$ 118,000	\$ 118,000	Statewide
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat Subtotal =					\$ -	\$ 4,337,000	\$ 4,337,000	
Subd. 09 Land Acquisition, Habitat, and Recreation (22 Projects - Subtotal = \$29,901,000)								
09a	2020-015	DNR Scientific and Natural Areas	MN DNR	Molly Roske	\$ -	\$ 3,000,000	\$ 3,000,000	Statewide
09b	2020-053	Private Native Prairie Conservation through Native Prairie Bank	MN DNR	Judy Schulte	\$ -	\$ 2,000,000	\$ 2,000,000	Central, NW, SW, SE
09c	2020-044	Minnesota State Parks and State Trails Inholdings	MN DNR	Shelby Kok	\$ -	\$ 3,500,000	\$ 3,500,000	Statewide
09d	2020-028	Grants for Local Parks, Trails, and Natural Areas	MN DNR	Audrey Mularie	\$ -	\$ 2,400,000	\$ 2,400,000	Statewide
09e	2020-046	Mississippi River Aquatic Habitat Restoration and Mussel Reintroduction	Minneapolis Park and Recreation Board	Adam Arvidson	\$ -	\$ 1,800,000	\$ 1,800,000	Metro

2020 (FY21) Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2021	TOTAL ENRTF \$ Appropriated	Region*
09f	2020-042	Minnesota Hunter Walking Trails: Public Land Recreational Access	Ruffed Grouse Society	Gary Drotts	\$ -	\$ 300,000	\$ 300,000	Central, NW, NE
09g	2020-065	Turning Back to Rivers: Environmental and Recreational Protection	The Trust for Public Land	DJ Forbes	\$ -	\$ 1,000,000	\$ 1,000,000	Central, Metro, SW, SE
09h	2020-072	Metropolitan Regional Parks System Land Acquisition - Phase VI	Metropolitan Council	Jessica Lee	\$ -	\$ 1,000,000	\$ 1,000,000	Metro
09i	2020-045	Minnesota State Trails Development	MN DNR	Kent Skaar	\$ -	\$ 994,000	\$ 994,000	Statewide
09j	2020-019	Elm Creek Restoration - Phase IV	City of Champlin	Todd Tuominen	\$ -	\$ 500,000	\$ 500,000	Metro
09k	2020-060	Superior Hiking Trail As Environmental Showcase	Superior Hiking Trail Association	Lisa Luukkala	\$ -	\$ 450,000	\$ 450,000	NE
09l	2020-066	Upper St. Anthony Falls Enhancements	Friends of the Lock & Dam	Kjersti Monson	\$ -	\$ 2,800,000	\$ 2,800,000	Metro
09m	2020-068	Whiskey Creek and Mississippi River Water Quality, Habitat, and Recreation	Mississippi Headwaters Board	Tim Terrill	\$ -	\$ 500,000	\$ 500,000	Central
09n	2020-049	Perham to Pelican Rapids Regional Trail (West Segment)	Otter Tail County	Matthew Yavarow	\$ -	\$ 2,600,000	\$ 2,600,000	Central
09o	2020-011	Crow Wing County Community Natural Area Acquisition	Crow Wing County	Ryan Simonson	\$ -	\$ 400,000	\$ 400,000	Central
09p	2020-057	Rocori Trail - Phase III	Rocori Trail Construction Board	Pete Weber	\$ -	\$ 1,200,000	\$ 1,200,000	Central
09q	2020-039	Mesabi Trail: New Trail and Additional Funding	St. Louis and Lake Counties Regional Railroad Authority	Bill Dahl	\$ -	\$ 1,000,000	\$ 1,000,000	NE
09r	2020-056	Ranier Safe Harbor and Transient Dock on Rainy Lake	City of Ranier	Sherril Gautreaux	\$ -	\$ 762,000	\$ 762,000	NE
09s	2020-010	Crane Lake Voyageurs National Park Campground and Visitors Center	Town of Crane Lake	Jim Janssen	\$ -	\$ 3,100,000	\$ 3,100,000	NE
09t	2020-006	Chippewa County Acquisition, Recreation and Education	Chippewa County	Scott Williams	\$ -	\$ 160,000	\$ 160,000	SW
09u	2020-058	Sportsmen's Training and Developmental Learning Center	Minnesota Forest Zone Trappers Association	Ray Sogard	\$ -	\$ 85,000	\$ 85,000	NE
09v	2020-097	Birch Lake Recreation Area	City of Babbitt	Cathy Hoheisel	\$ -	\$ 350,000	\$ 350,000	
Subd. 09 Land Acquisition, Habitat, and Recreation Subtotal =					\$ -	\$ 29,901,000	\$ 29,901,000	

2020 (FY21) Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2021	TOTAL ENRTF \$ Appropriated	Region*
Subd. 10 Emerging Issues Account; Wastewater Renewable Energy Demonstration Grants (1 Project - Subtotal = \$1,095,000)								
10	2020-080	Wastewater Renewable Energy Demonstration Grants	LCCMR/PFA	Becca Nash	\$ -	\$ 1,095,000	\$ 1,095,000	Statewide
Subd 10 Emerging Issues Account; Wastewater Renewable Energy Demonstration Grants Subtotal =					\$ -	\$ 1,095,000	\$ 1,095,000	
Subd. 11 Contract Agreement Reimbursement (1 Project - Subtotal = \$135,000)								
11	2020-008	Contract Agreement Reimbursement	MN DNR	Katherine Sherman-Hoehn	\$ -	\$ 135,000	\$ 135,000	Statewide
Subd. 11 Contract Agreement Reimbursement Subtotal =					\$ -	\$ 135,000	\$ 135,000	
Subd. 20 Transfers (7 projects - Subtotal = \$3,932,000)								
20a1	2020-070	Unprecedented Change Threatens Minnesota's Pristine Lakes	Science Museum of Minnesota	Mark Edlund	\$ 482,000	\$ -	\$ 482,000	Central, NW, NE
20a2	2020-084	Wastewater Pond Optimization	Minnesota Pollution Control Agency	Joel Peck	\$ 700,000	\$ -	\$ 700,000	
20a3	2020-085	Applied Research in State Mineral and Water Resources	U of MN - NRRI	George Hudak	\$ 750,000	\$ -	\$ 750,000	
20a4	2020-086	Chloride Pollution Reduction	MN PCA	Brooke Asleson	\$ 500,000	\$ -	\$ 500,000	
20a5	2020-087	CWD Prion Research in Soils	U of MN	Tiffany Wolf	\$ 336,000	\$ -	\$ 336,000	
20b	2020-076	Lawns to Legumes (combined with Subd 08m +\$118,000)*	BWSR	Dan Shaw	\$ 880,000	\$ -	\$ 880,000	Statewide
20c	2020-090	Emerging Issues Account*	LCCMR	Becca Nash	\$ 284,000	\$ -	\$ 284,000	
Subd. 20 Transfers Subtotal =					\$ 3,932,000	\$ -	\$ 3,932,000	
TOTAL ENRTF \$					\$ 3,932,000	\$ 61,387,000	\$ 65,319,000	

*Estimate amount, pending final close-out of completing projects being transferred

CHAPTER 6--S.F.No. 20

An act relating to state government; appropriating money for environment, natural resources, and tourism; appropriating money from environment and natural resources trust fund; modifying fees and programs; modifying disposition and expenditure of certain funds; creating accounts; authorizing sales and conveyances of certain state land; adding to and deleting from state parks and recreation areas; modifying state land and school trust land provisions; modifying forestry provisions; modifying aquaculture provisions; modifying game and fish laws; modifying Water Law; modifying natural resource and environment provisions; prohibiting PFAS in food packaging; providing for DUI conformity for operating recreational vehicles; requiring rulemaking; requiring reports; making technical corrections; amending Minnesota Statutes 2020, sections 16B.335, subdivision 2; 17.4982, subdivisions 6, 8, 9, 12, by adding subdivisions; 17.4985, subdivisions 2, 3, 5; 17.4986, subdivisions 2, 4; 17.4991, subdivision 3; 17.4992, subdivision 2; 17.4993, subdivision 1; 35.155, subdivision 7, by adding a subdivision; 84.027, subdivisions 13a, 18; 84.415, by adding a subdivision; 84.63; 84.631; 84.795, subdivision 5; 84.82, subdivisions 1a, 7a; 84.83, subdivision 5; 84.943, subdivisions 3, 5; 84.944, subdivision 1; 84.946, subdivision 4; 84D.11, subdivision 1a; 85.019, by adding a subdivision; 85.052, subdivisions 1, 2, 6, by adding a subdivision; 85.053, subdivision 2, by adding a subdivision; 85.054, subdivision 1; 85.43; 85.47; 86B.705, subdivision 2; 89.021, by adding a subdivision; 89.17; 89.37, subdivision 3; 89A.11; 92.50, by adding a subdivision; 92.502; 94.3495, subdivision 3; 97A.065, subdivision 2; 97A.075, subdivisions 1, 7; 97A.126, by adding a subdivision; 97A.401, subdivision 1, by adding a subdivision; 97A.421, subdivision 1, by adding a subdivision; 97A.475, subdivisions 2, 3, 3a, 4; 97A.505, subdivisions 3b, 8; 97B.022, by adding a subdivision; 97B.036; 97B.055, subdivision 2; 97B.086; 97B.715, subdivision 1; 97B.801; 97B.811, subdivision 4a; 97C.005, subdivision 3; 97C.081, subdivisions 3, 3a; 97C.342, subdivision 2; 97C.401, by adding a subdivision; 97C.605, subdivision 3; 97C.611; 97C.805, subdivision 2; 97C.836; 103C.315, subdivision 4; 103G.271, subdivision 4a, by adding a subdivision; 103G.401; 115A.1310, subdivision 12b; 115A.1312, subdivision 1; 115A.1314, subdivision 1; 115A.1316, subdivision 1; 115A.1318, subdivision 2; 115A.1320, subdivision 1; 115A.5501, subdivision 3; 115A.565, subdivision 1; 115B.17, subdivision 13; 115B.406, subdivisions 1, 9; 115B.407; 115B.421; 116.07, subdivision 7, by adding a subdivision; 116G.07, by adding a subdivision; 116G.15, by adding a subdivision; 127A.353, subdivision 4; 169A.20, subdivision 1; 169A.52, by adding a subdivision; 169A.54, by adding a subdivision; 171.306, by adding a subdivision; 290C.01; 290C.04; Laws 2016, chapter 154, sections 16; 48; Laws 2016, chapter 189, article 3, section 3, subdivision 5; Laws 2017, chapter 96, section 2, subdivision 9, as amended; Laws 2018, chapter 214, article 4, section 2, subdivision 6; Laws 2019, First Special Session chapter 4, article 1, sections 2, subdivision 9; 3, subdivisions 4, 5; article 3, section 109, as amended; proposing coding for new law in Minnesota Statutes, chapters 84; 86B; 92; 103F; 103G; 171; 325F; repealing Minnesota Statutes 2020, sections 84.91, subdivision 1; 85.0505, subdivision 3; 85.0507; 85.054, subdivision 19; 86B.331, subdivision 1; 169A.20, subdivisions 1a, 1b, 1c; Minnesota Rules, part 7044.0350.

ARTICLE 5**ENVIRONMENT AND NATURAL RESOURCES TRUST FUND FISCAL YEAR 2021****Section 1. APPROPRIATIONS.**

The sums shown in the columns marked "Appropriations" are appropriated to the agencies and for the purposes specified in this article. The appropriations are from the environment and natural resources trust fund, or another named fund, and are available for the fiscal years indicated for each purpose. The figures "2020" and "2021" used in this article mean that the appropriations listed under them are available for the fiscal year ending June 30, 2020, or June 30, 2021, respectively. "The first year" is fiscal year 2020. "The second year" is fiscal year 2021. "The biennium" is fiscal years 2020 and 2021.

<u>APPROPRIATIONS</u>	
<u>Available for the Year</u>	
<u>Ending June 30</u>	
<u>2020</u>	<u>2021</u>

Sec. 2. MINNESOTA RESOURCES**Subdivision 1. Total Appropriation**

	<u>\$</u>		<u>-0-</u>	<u>\$</u>		<u>61,387,000</u>
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The amounts that may be spent for each purpose are specified in the following subdivisions. Appropriations in the second year are available for four years beginning July 1, 2020, unless otherwise stated in the appropriation. Any unencumbered balance remaining in the first year does not cancel and is available for the second year or until the end of the appropriation.

Subd. 2. Definition

"Trust fund" means the Minnesota environment and natural resources trust fund established under the Minnesota Constitution, article XI, section 14.

Subd. 3. Foundational Natural Resource Data and Information

	<u>-0-</u>		<u>\$</u>		<u>8,593,000</u>
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(a) Geologic Atlases for Water Resource Management

\$2,000,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota,

Minnesota Geological Survey, to continue producing county geologic atlases to inform management of surface water and groundwater resources. This appropriation is to complete Part A, which focuses on the properties and distribution of earth materials to define aquifer boundaries and the connection of aquifers to the land surface and surface water resources.

(b) Expanding Minnesota Ecological Monitoring Network

\$800,000 the second year is from the trust fund to the commissioner of natural resources to improve conservation and management of Minnesota's native forests, wetlands, and grasslands by expanding the partially established long-term Ecological Monitoring Network that will provide critical knowledge of how ecosystem dynamics and conditions change through time.

(c) County Groundwater Atlas

\$1,125,000 the second year is from the trust fund to the commissioner of natural resources to continue producing county geologic atlases to inform management of surface water and groundwater resources for drinking water and other purposes. This appropriation is for Part B, to characterize the potential water yields of aquifers and the aquifers' sensitivity to contamination.

(d) Foundational Hydrology Data for Wetland Protection and Restoration

\$400,000 the second year is from the trust fund to the commissioner of natural resources to improve wetland protection, management, and restoration in Minnesota by completing the partially established long-term Wetland Hydrology Monitoring Network that will provide critical knowledge of wetland hydrology dynamics. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(e) Voyageurs Wolf Project - Phase II

\$575,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to

study summertime wolf predation on deer, moose, and other species in the Voyageurs region to inform management of wildlife. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(f) Expanding Restoration and Promoting Awareness of Native Mussels

\$489,000 the second year is from the trust fund to the Minnesota Zoological Garden to promote mussel conservation by rearing juvenile mussels for reintroduction, researching methods to improve growth and survival in captivity, and encouraging public action to benefit water quality. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(g) Improving Pollinator Conservation by Revealing Habitat Needs

\$500,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to use citizen scientists and novel analyses to determine the nesting and overwintering needs of wild bees to allow more specific protection and enhancement of pollinator habitat across the state.

(h) Bee Minnesota - Protect Our Native Bumblebees

\$650,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to protect native bee health by investigating the potential to mitigate against pathogens that may be transmissible between honeybees and wild bees and by promoting best practices to beekeepers and the public. This appropriation is subject to Minnesota Statutes, section 116P.10.

(i) Bobcat and Fisher Habitat Use and Interactions

\$400,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to identify potential solutions to reverse the fisher population decline through better understanding of habitat, diet, and activity patterns of bobcats and fishers.

(j) Healthy Prairies III: Restoring Minnesota Prairie Plant Diversity

\$500,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to improve Minnesota prairie resiliency by increasing locally sourced seed availability and diversity, evaluating use of beneficial microbes in prairie restorations, and assessing adaptation and adaptive capacity of prairie plant populations.

(k) Freshwater Sponges and AIS: Engaging Citizen Scientists

\$400,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota, Crookston, to use citizen scientists to study the geographic distribution, taxonomic diversity, and antifouling potential of freshwater sponges against aquatic invasive species.

(l) Do Beavers Buffer Against Droughts and Floods?

\$168,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Voyageurs National Park to analyze existing data sets to determine the role of beaver populations and beaver ponds in buffering the region against droughts and floods.

(m) Enhancing Bat Recovery by Optimizing Artificial Roost Structures

\$190,000 the second year is from the trust fund to the commissioner of natural resources to improve the survival of bats by identifying characteristics of successful artificial bat roost structures and optimizing the structures for bat use and reproduction. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(n) Tools for Supporting Healthy Ecosystems and Pollinators

\$198,000 the second year is from the trust fund to the commissioner of natural resources to create a pollination companion guide to the Department of

Natural Resources' Field Guides to the Native Plant Communities of Minnesota for conservation practitioners to better integrate plant-pollinator interactions into natural resource planning and decision-making.

(o) Conserving Black Terns and Forster's Terns in Minnesota

\$198,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to assess the distribution and breeding status of black tern and Forster's tern and to make conservation and restoration recommendations to improve the suitability of habitat for these two bird species in Minnesota.

Subd. 4. **Water Resources**

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3,457,000

(a) Managing Highly Saline Waste from Municipal Water Treatment

\$250,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to develop a cost- and energy-efficient method of managing the concentrated saline waste from a municipal water treatment plant to increase the feasibility of using reverse osmosis for centralized water softening and sulfate removal. This appropriation is subject to Minnesota Statutes, section 116P.10.

(b) Technology for Energy-Generating On-site Industrial Wastewater Treatment

\$450,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to improve water quality and generate cost savings by developing off the shelf technology that treats industrial wastewater on-site and turns pollutants into hydrogen and methane for energy. This appropriation is subject to Minnesota Statutes, section 116P.10.

(c) Microplastics: Transporters of Contaminants in Minnesota Waters

\$425,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to

study how several types of common microplastics transport contaminants of concern in Minnesota waters.

(d) Developing Strategies to Manage PFAS in Land-Applied Biosolids

\$1,404,000 the second year is from the trust fund to the commissioner of the Pollution Control Agency to help municipal wastewater plants, landfills, and compost facilities protect human health and the environment by developing strategies to manage per- and polyfluoroalkyl substances (PFAS) in land-applied biosolids.

(e) Quantifying New Urban Precipitation and Water Reality

\$500,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to better guide storm water management by evaluating the groundwater and surface water interactions contributing to high water tables and damage to home basements and underground infrastructure in urban areas.

(f) Innovative Solution for Protecting Minnesota from PFAS Contamination

\$250,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Dem-Con Companies to demonstrate a new technology for protecting the state's drinking water and natural resources by eliminating per- and polyfluoroalkyl substances (PFAS) from point source discharges. This appropriation is subject to Minnesota Statutes, section 116P.10, related to royalties, copyrights, patents, and sale of products and assets.

(g) Expanding Protection of Minnesota Water through Industrial Conservation

\$178,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Minnesota technical assistance program in partnership with the Minnesota Rural Water Association to provide technical assistance to businesses to decrease industrial and commercial water

use in communities at risk for inadequate groundwater supply or quality.

**Subd. 5. Technical Assistance,
Outreach, and Environmental
Education**

-0-

2,871,000

**(a) Statewide Environmental Education via Public
Television Outdoor Series**

\$300,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Pioneer Public Television to produce approximately 25 new episodes of a statewide outdoor public television series designed to inspire Minnesotans to connect with the outdoors and restore and protect the environment.

**(b) Minnesota Freshwater Quest: Environmental
Education on State Waterways**

\$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Wilderness Inquiry for approximately 10,000 underserved Minnesota youth to explore and improve local waterways using the place-based and hands-on Minnesota Freshwater Quest environmental education program.

(c) Teach Science: Schools as STEM Living Laboratories

\$250,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Climate Generation: A Will Steger Legacy to prepare students for the challenges and careers of the future by connecting new science standards, renewable energy, and STEM opportunities in teacher trainings, classroom demonstrations, and program support across the state.

**(d) Mentoring Next Generation of Conservation
Professionals**

\$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Minnesota Valley National Wildlife Refuge Trust, Inc., to provide paid internships and apprenticeships for diverse young people to learn about careers in the

conservation field from United States Fish and Wildlife Service professionals while working at the Minnesota Valley National Wildlife Refuge and Wetland Management District.

(e) Jay C. Hormel Nature Center Supplemental Teaching Staff

\$225,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Austin to expand the Jay C. Hormel Nature Center environmental education program beyond the city of Austin to students in southeastern Minnesota for three years.

(f) 375 Underserved Youth Learn Minnesota Ecosystems by Canoe

\$375,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the YMCA of the Greater Twin Cities to connect approximately 375 underserved and diverse teens from urban areas and first-ring suburbs to environmental sciences in the natural world through canoeing and learning expeditions with experienced outdoor education counselors. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(g) YES! Students Take on Water Quality Challenge - Phase II

\$199,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Prairie Woods Environmental Learning Center to mobilize local watershed stewardship efforts in approximately 20 communities through student-driven action projects.

(h) Engaging Minnesotans with Phenology: Radio, Podcasts, Citizen Science

\$198,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Northern Community Radio, Inc., in partnership with the Board of Regents of the University of Minnesota to build the next generation of conservationists using phenology, radio broadcasts,

podcasts, and an online, interactive map interface to inspire teachers, students, and the public to get outside and experience nature.

(i) Driving Conservation Behavior for Native Mussels and Water Quality

\$191,000 the second year is from the trust fund to the Minnesota Zoological Garden to develop research-supported strategies to engage the public in specific conservation behaviors to improve water quality and native mussel health across the state.

(j) Workshops and Outreach to Protect Raptors from Lead Poisoning

\$133,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota, Raptor Center, in cooperation with the Department of Natural Resources and other conservation partners, to provide hunters with outreach and workshops on alternatives to lead hunting ammunition, including copper ammunition as an alternative, and to promote voluntary selection of nontoxic ammunition to protect raptors and other wildlife in Minnesota from accidental lead poisoning caused by ingestion of ammunition fragments.

Subd. 6. Aquatic and Terrestrial Invasive Species

-0-

10,425,000

(a) Minnesota Invasive Terrestrial Plants and Pests Center (MITPPC) - Phase V

\$5,000,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to support the Minnesota Invasive Terrestrial Plants and Pests Center to fund approximately 15 new, high-priority research projects that will lead to better management of invasive plants, pathogens, and pests on Minnesota's natural and agricultural lands. This appropriation is subject to Minnesota Statutes, section 116P.10. This appropriation is available until June 30, 2026, by which time the project must be completed and final products delivered.

(b) Protect Community Forests by Managing Ash for Emerald Ash Borer

\$3,500,000 the second year is from the trust fund to the commissioner of natural resources to reduce emerald ash borer by providing surveys, assessments, trainings, assistance, and grants for communities to manage emerald ash borer, plant a diversity of trees, and engage citizens in community forestry activities. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(c) Biological Control of White-Nose Syndrome in Bats - Phase III

\$440,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to continue assessing and developing a biocontrol agent for white-nose syndrome in bats.

(d) Applying New Tools and Techniques Against Invasive Carp

\$478,000 the second year is from the trust fund to the commissioner of natural resources to apply new monitoring, outreach, and removal techniques and to continue work with commercial anglers to protect Minnesota waters from invasive carp.

(e) Emerald Ash Borer and Black Ash: Maintaining Forests and Benefits

\$700,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to use ongoing experiments to determine statewide long-term emerald ash borer impacts on water, vegetation, and wildlife; to determine optimal replacement species and practices for forest diversification; and to develop criteria for prioritizing mitigation activities. This appropriation is available until June 30, 2026, by which time the project must be completed and final products delivered.

(f) Testing Effectiveness of Aquatic Invasive Species Removal Methods

\$110,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to test how well boat-cleaning methods work, to provide

the Department of Natural Resources with a risk assessment, and to provide recommendations for improving boat-launch cleaning stations to prevent the spread of aquatic invasive species.

(g) Invasive *Didymosphenia* Threatens North Shore Streams

\$197,000 the second year is from the trust fund to the Science Museum of Minnesota to evaluate the recent spread, origin, cause, and economic and ecological threat of didymo formation in North Shore streams and Lake Superior to inform management and outreach.

Subd. 7. Air Quality and Renewable Energy

-0-

573,000

(a) Storing Renewable Energy in Flow Battery for Grid Use

\$250,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota, on behalf of the Morris campus, to analyze the potential of adding a flow battery and solar energy generation to the University of Minnesota Morris's existing renewable-energy-intensive microgrid.

(b) Eco-Friendly Plastics from Cloquet Pulp-Mill Lignin

\$193,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to reduce environmental pollution from plastics by creating eco-friendly replacements using lignin from the pulp mill in Cloquet, Minnesota. This appropriation is subject to Minnesota Statutes, section 116P.10.

(c) Diverting Unsold Food from Landfills and Reducing Greenhouse Gases

\$130,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Second Harvest Heartland to prevent food from going to landfills and reduce greenhouse gas emissions by helping businesses donate unsold prepared food to food shelves.

Subd. 8. Methods to Protect or Restore Land, Water, and Habitat-0-4,337,000**(a) Pollinator Central: Habitat Improvement with Citizen Monitoring**

\$750,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Great River Greening to restore and enhance approximately 400 acres of pollinator habitat on traditional and nontraditional sites such as roadsides and turf grass from Hastings to St. Cloud to benefit pollinators and build knowledge by engaging approximately 100 citizens in monitoring the impact of habitat improvements. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(b) Pollinator and Beneficial Insect Strategic Habitat Program

\$750,000 the second year is from the trust fund to the Board of Water and Soil Resources for building a new initiative to strategically restore and enhance approximately 1,000 acres of diverse native habitat to benefit multiple insects through grants, cost-share, and outreach. Notwithstanding subdivision 14, paragraph (e), restorations and enhancements may take place on land enrolled in conservation reserve program and reinvest in Minnesota easement programs. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(c) Lignin-Coated Fertilizers for Phosphate Control

\$250,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to test a new, natural, slow-release fertilizer coating made from processed wood to decrease phosphorus runoff from farmland while also storing carbon in soils. This appropriation is subject to Minnesota Statutes, section 116P.10.

(d) Implementing Hemp Crop Rotation to Improve Water Quality

\$700,000 the second year is from the trust fund to the Minnesota State Colleges and Universities System for Central Lakes College to evaluate how hemp crops reduce nitrogen contamination of surface water and groundwater in conventional crop rotations and demonstrate the environmental and economic benefits of hemp production. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(e) Developing Cover-Crop Systems for Sugar Beet Production

\$300,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to develop agronomic guidelines to support growers adopting cover-crop practices in sugar beet production in west-central and northwest Minnesota.

(f) Native Eastern Larch Beetle Decimating Minnesota's Tamarack Forests

\$398,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to understand conditions triggering eastern larch beetle outbreaks and develop management techniques to protect tamarack forests from this native insect. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(g) Habitat Associations of Mississippi Bottomland Forest Marsh Birds

\$275,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the National Audubon Society, Minnesota office, to evaluate habitat associations of bottomland forest birds in response to restoration actions to better target restoration efforts for wildlife. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(h) Peatland Restoration in the Lost River State Forest

\$135,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Roseau River Watershed District to collect

physical attribute data from drained peatlands, incorporate the data into a decision matrix, and generate a report detailing peatland restoration potential throughout the Lost River State Forest.

(i) Prescribed Burning for Brushland-Dependent Species - Phase II

\$147,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to compare the effects of spring, summer, and fall burns on birds and vegetation and to provide guidelines for maintaining healthy brushland habitat for a diversity of wildlife and plant species.

(j) Pollinator Habitat Creation Along Urban Mississippi River

\$129,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Friends of the Mississippi River to remove invasive plants and replace them with high-value native species at three urban sites along the Mississippi River to improve habitat for pollinators and other wildlife. This appropriation is available until June 30, 2026, by which time the project must be completed and final products delivered.

(k) Increase Golden Shiner Production to Protect Aquatic Communities

\$188,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Minnesota Sea Grant in Duluth to identify and demonstrate best methods for in-state production of golden shiners to address angler demand while reducing the risk of introducing and spreading invasive species and to communicate findings through reports, manuals, and workshops. Production of shiners in this project must not take place in wetlands.

(l) Restoring Turf to Native Pollinator Gardens Across Metro

\$197,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Wilderness in the City to transition turf to native gardens for pollinator habitat, establish long-term

volunteer stewardship networks, and help connect diverse populations with nature throughout the metropolitan regional park system. A letter of commitment from the respective regional park implementing agency must be provided before money from this appropriation is spent at a regional park within the agency's jurisdiction.

(m) Lawns to Legumes

\$118,000 the second year is from the trust fund to the Board of Water and Soil Resources for demonstration projects that provide grants or payments to plant residential lawns with native vegetation and pollinator-friendly forbs and legumes to protect a diversity of pollinators. The board must establish criteria for grants or payments awarded under this section. Grants or payments awarded under this section may be made for up to 75 percent of the costs of the project, except that in areas identified by the United States Fish and Wildlife Service as areas where there is a high potential for rusty patched bumble bees to be present, grants may be awarded for up to 90 percent of the costs of the project.

**Subd. 9. Land Acquisition,
Habitat, and Recreation**

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29,901,000

(a) DNR Scientific and Natural Areas

\$3,000,000 the second year is from the trust fund to the commissioner of natural resources for the scientific and natural area (SNA) program to restore, improve, and enhance wildlife habitat on SNAs; increase public involvement and outreach; and strategically acquire high-quality lands that meet criteria for SNAs under Minnesota Statutes, section 86A.05, from willing sellers.

(b) Private Native Prairie Conservation through Native Prairie Bank

\$2,000,000 the second year is from the trust fund to the commissioner of natural resources to provide technical stewardship assistance to private landowners, restore and enhance native prairie protected by easements in the native prairie bank, and acquire easements for the native prairie bank in accordance

with Minnesota Statutes, section 84.96, including preparing initial baseline property assessments. Up to \$60,000 of this appropriation may be deposited in the natural resources conservation easement stewardship account, created in Minnesota Statutes, section 84.69, proportional to the number of easement acres acquired.

(c) Minnesota State Parks and State Trails Inholdings

\$3,500,000 the second year is from the trust fund to the commissioner of natural resources to acquire high-priority inholdings from willing sellers within the legislatively authorized boundaries of state parks, recreation areas, and trails to protect Minnesota's natural heritage, enhance outdoor recreation, and promote tourism.

(d) Grants for Local Parks, Trails, and Natural Areas

\$2,400,000 the second year is from the trust fund to the commissioner of natural resources to solicit, rank, and fund competitive matching grants for local parks, trail connections, and natural and scenic areas under Minnesota Statutes, section 85.019. This appropriation is for local nature-based recreation, connections to regional and state natural areas, and recreation facilities and may not be used for athletic facilities such as sport fields, courts, and playgrounds.

(e) Mississippi River Aquatic Habitat Restoration and Mussel Reintroduction

\$1,800,000 the second year is from the trust fund. Of this amount, \$1,549,000 is to the commissioner of natural resources for an agreement with the Minneapolis Park and Recreation Board and \$251,000 is to the commissioner of natural resources to restore lost habitat and reintroduce mussels in the Mississippi River above St. Anthony Falls. This work includes creating habitat and species restoration plans, implementing the restoration plans, and monitoring effectiveness of the restoration for multiple years after implementation. This appropriation is available until June 30, 2027, by which time the project must be completed and final products delivered.

(f) Minnesota Hunter Walking Trails: Public Land Recreational Access

\$300,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Ruffed Grouse Society to improve Minnesota's hunter walking trail system by restoring or upgrading trailheads and trails, developing new walking trails, and compiling enhanced maps for use by managers and the public.

(g) Turning Back to Rivers: Environmental and Recreational Protection

\$1,000,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with The Trust for Public Land to help local communities acquire priority land along the Mississippi, St. Croix, and Minnesota Rivers and their tributaries to protect natural resources, provide buffers for flooding, and improve access for recreation.

(h) Metropolitan Regional Parks System Land Acquisition - Phase VI

\$1,000,000 the second year is from the trust fund to the Metropolitan Council for grants to acquire land within the approved park boundaries of the metropolitan regional park system. This appropriation must be matched by at least 40 percent of nonstate money.

(i) Minnesota State Trails Development

\$994,000 the second year is from the trust fund to the commissioner of natural resources to expand high-priority recreational opportunities on Minnesota's state trails by rehabilitating, improving, and enhancing existing state trails. The high-priority trail bridges to be rehabilitated or replaced under this appropriation include, but are not limited to, those on the Taconite, Great River Ridge, and C. J. Ramstad/Northshore State Trails.

(j) Elm Creek Restoration - Phase IV

\$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Champlin to conduct habitat and stream restoration of approximately 0.7 miles of Elm Creek

shoreline above Mill Pond Lake and through the Elm Creek Protection Area.

(k) Superior Hiking Trail as Environmental Showcase

\$450,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Superior Hiking Trail Association to rebuild damaged and dangerous segments and create a new trail segment of the Superior Hiking Trail to minimize environmental impacts, make the trail safer for users, and make the trail more resilient for future use and conditions.

(l) Upper St. Anthony Falls Enhancements

\$2,800,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Friends of the Lock and Dam in partnership with the city of Minneapolis to design and install green infrastructure, public access, and habitat restorations on riverfront land at Upper St. Anthony Falls for water protection, recreation, and environmental education purposes. Of this amount, up to \$600,000 is for planning, design, and engagement. No funds from this appropriation may be spent until Congress directs the U.S. Army Corps of Engineers to convey an interest in the Upper St. Anthony Falls property to the city of Minneapolis for use as a visitor center. After this congressional act is signed into law, up to \$100,000 of the planning, design, and engagement funds may be spent. The remaining planning, design, and engagement funds may be spent after a binding agreement has been secured to acquire the land or access and use rights to the land for at least 25 years. Any remaining balance of the appropriation may be spent on installing enhancements after the Upper St. Anthony Falls land has been acquired by the city of Minneapolis.

(m) Whiskey Creek and Mississippi River Water Quality, Habitat, and Recreation

\$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Mississippi Headwaters Board to acquire and transfer approximately 13 acres of land to the city of Baxter for future construction of water quality, habitat,

and recreational improvements to protect the Mississippi River.

(n) Perham to Pelican Rapids Regional Trail (West Segment)

\$2,600,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Otter Tail County to construct the west segment of the 32-mile Perham to Pelican Rapids Regional Trail that will connect the city of Pelican Rapids to Maplewood State Park.

(o) Crow Wing County Community Natural Area Acquisition

\$400,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Crow Wing County to acquire approximately 65 acres of land adjacent to the historic fire tower property to allow for diverse recreational opportunities while protecting wildlife habitat and preventing forest fragmentation. Any revenue generated from selling products or assets developed or acquired with this appropriation must be repaid to the trust fund unless a plan is approved for reinvestment of income in the project as provided under Minnesota Statutes, section 116P.10.

(p) Rocori Trail - Phase III

\$1,200,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Rocori Trail Construction Board to design and construct Phase III of the Rocori Trail along the old Burlington Northern Santa Fe rail corridor between the cities of Cold Spring and Rockville.

(q) Mesabi Trail: New Trail and Additional Funding

\$1,000,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the St. Louis and Lake Counties Regional Railroad Authority for constructing the Mesabi Trail beginning at the intersection of County Road 20 and Minnesota State Highway 135 and terminating at 1st Avenue North and 1st Street North in the city of Biwabik in St. Louis County. This appropriation may

not be spent until all Mesabi Trail projects funded with trust fund appropriations before fiscal year 2020, with the exception of the project funded under Laws 2017, chapter 96, section 2, subdivision 9, paragraph (g), are completed.

(r) Ranier Safe Harbor and Transient Dock on Rainy Lake

\$762,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Ranier to construct a dock that accommodates boats 26 feet or longer with the goal of increasing public access for boat recreation on Rainy Lake. Any revenue generated from selling products or assets developed or acquired with this appropriation must be repaid to the trust fund unless a plan is approved for reinvestment of income in the project as provided under Minnesota Statutes, section 116P.10.

(s) Crane Lake Voyageurs National Park Campground and Visitor Center

\$3,100,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the town of Crane Lake to design and construct a new campground and to plan and preliminarily prepare a site for constructing a new Voyageurs National Park visitor center on land acquired for these purposes in Crane Lake. Any revenue generated from selling products or assets developed or acquired with this appropriation must be repaid to the trust fund unless a plan is approved for reinvestment of income in the project as provided under Minnesota Statutes, section 116P.10.

(t) Chippewa County Acquisition, Recreation, and Education

\$160,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Chippewa County to acquire wetland and floodplain forest and abandoned gravel pits along the Minnesota River to provide water filtration, education, and recreational opportunities.

(u) Sportsmen's Training and Developmental Learning Center

\$85,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Minnesota Forest Zone Trappers Association to complete a site evaluation and master plan for the Sportsmen's Training and Developmental Learning Center near Hibbing. Any revenue generated from selling products or assets developed or acquired with this appropriation must be repaid to the trust fund unless a plan is approved for reinvestment of income in the project as provided under Minnesota Statutes, section 116P.10.

(v) Birch Lake Recreation Area

\$350,000 the second year is from the trust fund to the commissioner of natural resources for a grant to the city of Babbitt to expand the Birch Lake Recreation Area by adding a new campground to include new campsites, restrooms, and other facilities. This appropriation is available until June 30, 2025.

Subd. 10. Emerging Issues
Account; Wastewater Renewable
Energy Demonstration Grants

-0- 1,095,000

\$1,095,000 the second year is from the trust fund to an emerging issues account authorized in Minnesota Statutes, section 116P.08, subdivision 4, paragraph (d). Money appropriated under this subdivision must be used for grants in consultation with the Public Facilities Authority for renewable energy demonstration projects at wastewater treatment facilities.

Subd. 11. Contract Agreement
Reimbursement

-0- 135,000

\$135,000 the second year is from the trust fund to the commissioner of natural resources, at the direction of the Legislative-Citizen Commission on Minnesota Resources, for expenses incurred for preparing and administering contracts for the agreements specified in this section. The commissioner must provide documentation to the Legislative-Citizen Commission on Minnesota Resources on the expenditure of these funds.

Subd. 12. Availability of Appropriations

Money appropriated in this section may not be spent on activities unless they are directly related to and necessary for a specific appropriation and are specified in the work plan approved by the Legislative-Citizen Commission on Minnesota Resources. Money appropriated in this section must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for a specific appropriation. Costs that are directly related to and necessary for an appropriation, including financial services, human resources, information services, rent, and utilities, are eligible only if the costs can be clearly justified and individually documented specific to the appropriation's purpose and would not be generated by the recipient but for receipt of the appropriation. No broad allocations for costs in either dollars or percentages are allowed. Unless otherwise provided, the amounts in this section are available until June 30, 2024, when projects must be completed and final products delivered. For acquisition of real property, the appropriations in this section are available for an additional fiscal year if a binding contract for acquisition of the real property is entered into before the expiration date of the appropriation. If a project receives a federal grant, the time period of the appropriation is extended to equal the federal grant period.

Subd. 13. Data Availability Requirements

Data collected by the projects funded under this section must conform to guidelines and standards adopted by MN.IT Services. Spatial data must also conform to additional guidelines and standards designed to support data coordination and distribution that have been published by the Minnesota Geospatial Information Office. Descriptions of spatial data must be prepared as specified in the state's geographic metadata guideline and must be submitted to the Minnesota Geospatial Information Office. All data must be accessible and free to the public unless made private under the Data Practices Act, Minnesota Statutes, chapter 13. To the extent practicable, summary data and results of projects funded under this section should be readily accessible on the Internet and identified as

having received funding from the environment and natural resources trust fund.

Subd. 14. Project Requirements

(a) As a condition of accepting an appropriation under this section, an agency or entity receiving an appropriation or a party to an agreement from an appropriation must comply with paragraphs (b) to (l) and Minnesota Statutes, chapter 116P, and must submit a work plan and annual or semiannual progress reports in the form determined by the Legislative-Citizen Commission on Minnesota Resources for any project funded in whole or in part with funds from the appropriation. Modifications to the approved work plan and budget expenditures must be made through the amendment process established by the Legislative-Citizen Commission on Minnesota Resources.

(b) A recipient of money appropriated in this section that conducts a restoration using funds appropriated in this section must use native plant species according to the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines and include an appropriate diversity of native species selected to provide habitat for pollinators throughout the growing season as required under Minnesota Statutes, section 84.973.

(c) For all restorations conducted with money appropriated under this section, a recipient must prepare an ecological restoration and management plan that, to the degree practicable, is consistent with the highest-quality conservation and ecological goals for the restoration site. Consideration should be given to soil, geology, topography, and other relevant factors that would provide the best chance for long-term success and durability of the restoration project. The plan must include the proposed timetable for implementing the restoration, including site preparation, establishment of diverse plant species, maintenance, and additional enhancement to establish the restoration; identify long-term maintenance and management needs of the restoration and how the maintenance, management, and enhancement will be financed; and take advantage of the best-available science and include innovative techniques to achieve the best restoration.

(d) An entity receiving an appropriation in this section for restoration activities must provide an initial restoration evaluation at the completion of the appropriation and an evaluation three years after the completion of the expenditure. Restorations must be evaluated relative to the stated goals and standards in the restoration plan, current science, and, when applicable, the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines. The evaluation must determine whether the restorations are meeting planned goals, identify any problems with implementing the restorations, and, if necessary, give recommendations on improving restorations. The evaluation must be focused on improving future restorations.

(e) All restoration and enhancement projects funded with money appropriated in this section must be on land permanently protected by a conservation easement or public ownership.

(f) A recipient of money from an appropriation under this section must give consideration to contracting with Conservation Corps Minnesota for contract restoration and enhancement services.

(g) All conservation easements acquired with money appropriated under this section must:

(1) be permanent;

(2) specify the parties to an easement in the easement;

(3) specify all of the provisions of an agreement that are permanent;

(4) be sent to the Legislative-Citizen Commission on Minnesota Resources in an electronic format at least ten business days before closing;

(5) include a long-term monitoring and enforcement plan and funding for monitoring and enforcing the easement agreement; and

(6) include requirements in the easement document to protect the quantity and quality of groundwater and surface water through specific activities such as keeping water on the landscape, reducing nutrient and contaminant loading, and not permitting artificial hydrological modifications.

(h) For any acquisition of lands or interest in lands, a recipient of money appropriated under this section must not agree to pay more than 100 percent of the appraised value for a parcel of land using this money to complete the purchase, in part or in whole, except that up to ten percent above the appraised value may be allowed to complete the purchase, in part or in whole, using this money if permission is received in advance of the purchase from the Legislative-Citizen Commission on Minnesota Resources.

(i) For any acquisition of land or interest in land, a recipient of money appropriated under this section must give priority to high-quality natural resources or conservation lands that provide natural buffers to water resources.

(j) For new lands acquired with money appropriated under this section, a recipient must prepare an ecological restoration and management plan in compliance with paragraph (c), including sufficient funding for implementation unless the work plan addresses why a portion of the money is not necessary to achieve a high-quality restoration.

(k) To ensure public accountability for using public funds, a recipient of money appropriated under this section must, within 60 days of the transaction, provide to the Legislative-Citizen Commission on Minnesota Resources documentation of the selection process used to identify parcels acquired and provide documentation of all related transaction costs, including but not limited to appraisals, legal fees, recording fees, commissions, other similar costs, and donations. This information must be provided for all parties involved in the transaction. The recipient must also report to the Legislative-Citizen Commission on Minnesota Resources any difference between the acquisition amount paid to the seller and the state-certified or state-reviewed appraisal, if a state-certified or state-reviewed appraisal was conducted.

(l) A recipient of an appropriation from the trust fund under this section must acknowledge financial support from the environment and natural resources trust fund in project publications, signage, and other public communications and outreach related to work completed using the appropriation. Acknowledgment may occur, as appropriate, through use of the trust fund

logo or inclusion of language attributing support from the trust fund. Each direct recipient of money appropriated in this section, as well as each recipient of a grant awarded pursuant to this section, must satisfy all reporting and other requirements incumbent upon constitutionally dedicated funding recipients as provided in Minnesota Statutes, section 3.303, subdivision 10, and chapter 116P.

(m) A recipient of an appropriation from the trust fund under this section that is receiving funding to conduct children's services, as defined in Minnesota Statutes, section 299C.61, subdivision 7, must certify to the commission, as part of the required work plan, that it performs criminal background checks for background check crimes, as defined in Minnesota Statutes, section 299C.61, subdivision 2, on all employees, contractors, and volunteers that have or may have access to a child to whom the recipient provides children's services using the appropriation.

Subd. 15. Payment Conditions and Capital-Equipment Expenditures

(a) All agreements, grants, or contracts referred to in this section must be administered on a reimbursement basis unless otherwise provided in this section. Notwithstanding Minnesota Statutes, section 16A.41, expenditures made on or after July 1, 2020, or the date the work plan is approved, whichever is later, are eligible for reimbursement unless otherwise provided in this section. Periodic payments must be made upon receiving documentation that the deliverable items articulated in the approved work plan have been achieved, including partial achievements as evidenced by approved progress reports. Reasonable amounts may be advanced to projects to accommodate cash-flow needs or match federal money. The advances must be approved as part of the work plan. No expenditures for capital equipment are allowed unless expressly authorized in the project work plan.

(b) Single-source contracts as specified in the approved work plan are allowed.

Subd. 16. Purchasing Recycled and Recyclable Materials

A political subdivision, public or private corporation, or other entity that receives an appropriation under this

section must use the appropriation in compliance with Minnesota Statutes, section 16C.0725, regarding purchasing recycled, repairable, and durable materials and Minnesota Statutes, section 16C.073, regarding purchasing and using paper stock and printing.

Subd. 17. Energy Conservation and Sustainable Building Guidelines

A recipient to whom an appropriation is made under this section for a capital improvement project must ensure that the project complies with the applicable energy conservation and sustainable building guidelines and standards contained in law, including Minnesota Statutes, sections 16B.325, 216C.19, and 216C.20, and rules adopted under those sections. The recipient may use the energy planning, advocacy, and State Energy Office units of the Department of Commerce to obtain information and technical assistance on energy conservation and alternative-energy development relating to planning and constructing the capital improvement project.

Subd. 18. Accessibility

Structural and nonstructural facilities must meet the design standards in the Americans with Disabilities Act (ADA) accessibility guidelines.

Subd. 19. Carryforward; Extension

(a) The availability of the appropriations for the following projects is extended to June 30, 2022:

(1) Laws 2017, chapter 96, section 2, subdivision 8, paragraph (k), Conservation Reserve Enhancement Program (CREP) Outreach and Implementation; and

(2) Laws 2018, chapter 214, article 4, section 2, subdivision 6, paragraph (b), Palmer Amaranth Detection and Eradication Continuation.

(b) The availability of the appropriations for the following projects is extended to June 30, 2023:

(1) Laws 2018, chapter 214, article 4, section 2, subdivision 10, Emerging Issues Account; and

(2) Laws 2019, First Special Session chapter 4, article 2, section 2, subdivision 8, paragraph (f), Lawns to Legumes.

(c) The availability of the appropriation under Laws 2018, chapter 214, article 4, section 2, subdivision 4, paragraph (1), Lake Agnes Treatment, is extended to June 30, 2024.

Subd. 20. Transfers

(a) Sauk River Dam Removal Transfers

The appropriation in Laws 2019, First Special Session chapter 4, article 2, section 2, subdivision 8, paragraph (c), Sauk River Dam Removal and Rock Rapids Replacement, in the amount of \$2,768,000, no longer needed for its original purpose is transferred as follows:

(1) \$482,000 is transferred to the Science Museum of Minnesota to determine how, when, and why lakes in pristine areas of the state without obvious nutrient loading are experiencing algal blooms;

(2) \$700,000 is transferred to the commissioner of the Minnesota Pollution Control Agency, in partnership with the Minnesota Rural Water Association and the University of Minnesota's technical assistance program, to implement a program to optimize existing pond wastewater treatment systems to increase nutrient removal and improve efficiency without requiring costly upgrades;

(3) \$750,000 is transferred to the Board of Regents of the University of Minnesota for academic and applied research through the MnDRIVE program at the Natural Resources Research Institute to develop and demonstrate technologies that enhance the long-term health and management of Minnesota's mineral and water resources. Of this amount, \$300,000 is to support demonstration of three sulfate reduction technologies for improved water quality, and \$450,000 is for continued characterization of Minnesota iron resources and for developing next-generation technologies and iron products. This research must be conducted in consultation with the Mineral Coordinating Committee established under Minnesota Statutes, section 93.0015;

(4) \$500,000 is transferred to the commissioner of the Pollution Control Agency for activities, training, and

grants that reduce chloride pollution. Of this amount, \$250,000 is for grants for upgrading, optimizing, or replacing water softener units. Priority for grants must be given to facilities needing improvements to comply with chloride water quality standards; and

(5) \$336,000 is transferred to the Board of Regents of the University of Minnesota to study chronic wasting disease prions in soils, including the assessment of sites where carcasses with chronic wasting disease have been disposed.

(b) Lawns to Legumes

The following amounts, estimated to be \$880,000, are transferred to the Board of Water and Soil Resources for demonstration projects that provide grants or payments to plant residential lawns with native vegetation and pollinator-friendly forbs and legumes to protect a diversity of pollinators. The board must establish criteria for grants or payments awarded under this clause. Grants or payments awarded under this clause may be made for up to 75 percent of the costs of the project, except that in areas identified by the United States Fish and Wildlife Service as areas where there is a high potential for rusty patched bumble bees to be present, grants may be awarded for up to 90 percent of the costs of the project:

(1) the unencumbered amount, estimated to be \$380,000, in Laws 2016, chapter 186, section 2, subdivision 9, paragraph (b), Minnesota Point Pine Forest Scientific and Natural Area Acquisition; and

(2) the unencumbered amount, estimated to be \$500,000, in Laws 2018, chapter 214, article 4, section 2, subdivision 6, paragraph (d), Developing RNA Interference to Control Zebra Mussels.

(c) Emerging Issues Account

The following amounts, estimated to be \$284,000, are transferred to an emerging issues account authorized in Minnesota Statutes, section 116P.08, subdivision 4, paragraph (d):

(1) the unencumbered amount, estimated to be \$100,000, in Laws 2015, chapter 76, section 2, subdivision 8, paragraph (b), Propagating Native Plants and Restoring Diverse Habitats;

(2) the unencumbered amount, estimated to be \$50,000, in Laws 2016, chapter 186, section 2, subdivision 6, paragraph (c), Advancing Microbial Invasive Species Monitoring from Ballast Discharge;

(3) the unencumbered amount, estimated to be \$11,000, in Laws 2017, chapter 96, section 2, subdivision 5, paragraph (a), Connecting Youth to Minnesota Waterways through Outdoor Classrooms;

(4) the unencumbered amount, estimated to be \$43,000, in Laws 2017, chapter 96, section 2, subdivision 5, paragraph (e), Local Planning and Implementation Efforts for Bird Habitat;

(5) the unencumbered amount, estimated to be \$30,000, in Laws 2017, chapter 96, section 2, subdivision 8, paragraph (a), Optimizing the Nutrition of Roadside Plants for Pollinators;

(6) the unencumbered amount, estimated to be \$10,000, in Laws 2017, chapter 96, section 2, subdivision 8, paragraph (f), Prescribed-Fire Management for Roadside Prairies;

(7) the unencumbered amount, estimated to be \$20,000, in Laws 2018, chapter 214, article 4, section 2, subdivision 4, paragraph (a), Pilot Program to Optimize Local Mechanical and Pond Wastewater-Treatment Plants; and

(8) the unencumbered amount, estimated to be \$20,000, in Laws 2018, chapter 214, article 4, section 2, subdivision 6, paragraph (e), Install and Evaluate an Invasive Carp Deterrent for Mississippi River Locks and Dams.

(d) Transfers and Availability

The transfers under this subdivision are effective June 30, 2021, and the transferred amounts are available until June 30, 2023.

Sec. 3. Laws 2017, chapter 96, section 2, subdivision 9, as amended by Laws 2019, First Special Session chapter 4, article 2, section 4, is amended to read:

Subd. 9. Land Acquisition, Habitat, and Recreation	999,000	13,533,000	-0-
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(a) Metropolitan Regional Parks System Land Acquisition

\$1,500,000 the first year is from the trust fund to the Metropolitan Council for grants to acquire approximately 70 acres of land within the approved park boundaries of the metropolitan regional park system. This appropriation may not be used to purchase habitable residential structures. A list of proposed fee title acquisitions must be provided as part of the required work plan. This appropriation must be matched by at least 40 percent of nonstate money that must be committed by December 31, 2017. This appropriation is available until June 30, 2020, by which time the project must be completed and final products delivered.

(b) Scientific and Natural Areas Acquisition and Restoration, Citizen Science, and Engagement

\$2,500,000 the first year is from the trust fund to the commissioner of natural resources to acquire land with high-quality native plant communities and rare features to be established as scientific and natural areas as provided in Minnesota Statutes, section 86A.05, subdivision 5, restore and improve scientific and natural areas, and provide technical assistance and outreach, including site steward events. At least one-third of the appropriation must be spent on restoration activities. A list of proposed acquisitions and restorations must be provided as part of the required work plan. Land acquired with this appropriation must be sufficiently improved to meet at least minimum management standards, as determined by the commissioner of natural resources. When feasible, consideration must be given to accommodate trails on lands acquired. This appropriation is available until June 30, 2020, by which time the project must be completed and final products delivered.

(c) Minnesota State Parks and State Trails Land Acquisition

\$1,500,000 the first year is from the trust fund to the commissioner of natural resources to acquire approximately 373 acres from willing sellers for authorized state trails and critical parcels within the statutory boundaries of state parks. State park land

acquired with this appropriation must be sufficiently improved to meet at least minimum management standards, as determined by the commissioner of natural resources. A list of proposed acquisitions must be provided as part of the required work plan. This appropriation is available until June 30, 2020, by which time the project must be completed and final products delivered.

(d) Minnesota State Trails Acquisition, Development, and Enhancement

\$999,000 in fiscal year 2017 and \$39,000 the first year are from the trust fund to the commissioner of natural resources for state trail acquisition, development, and enhancement in southern Minnesota. A proposed list of trail projects on authorized state trails must be provided as part of the required work plan. This appropriation is available until June 30, 2020, by which time the project must be completed and final products delivered.

(e) Native Prairie Stewardship and Prairie Bank Easement Acquisition

\$2,675,000 the first year is from the trust fund to the commissioner of natural resources to acquire native prairie bank easements in accordance with Minnesota Statutes, section 84.96, on approximately 250 acres, prepare baseline property assessments, restore and enhance native prairie sites, and provide technical assistance to landowners. Of this amount, up to \$132,000 may be deposited in a conservation easement stewardship account. Deposits into the conservation easement stewardship account must be made upon closing on conservation easements or at a time otherwise approved in the work plan. A list of proposed easement acquisitions must be provided as part of the required work plan. This appropriation is available until June 30, 2020, by which time the project must be completed and final products delivered.

(f) Leech Lake Acquisition

\$1,500,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Leech Lake Band of Ojibwe to acquire approximately 45 acres, including 0.67 miles of shoreline of high-quality aquatic and wildlife habitat

at the historic meeting place between Henry Schoolcraft and the Anishinabe people. The land must be open to public use including hunting and fishing. The band must provide a commitment that land will not be put in a federal trust through the Bureau of Indian Affairs.

(g) Mesabi Trail Development

\$2,269,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the St. Louis and Lake Counties Regional Railroad Authority for engineering and constructing segments of the Mesabi Trail. This appropriation is available until June 30, 2020, by which time the project must be completed and final products delivered.

(h) Tower Trailhead Boat Landing and Habitat Improvement - Phase II

\$600,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Tower to construct a trailhead, trail connection to the Mesabi Trail, and boat landing and to restore vegetative habitat on city-owned property. Plant and seed materials must follow the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines. This appropriation is available until June 30, ~~2020~~ 2023, by which time the project must be completed and final products delivered.

(i) Land Acquisition for Voyageurs National Park Crane Lake Visitors Center

\$950,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the town of Crane Lake, in partnership with Voyageurs National Park and the Department of Natural Resources, to acquire approximately 30 acres to be used for a visitor center and campground. Income generated by the campground may be used to support the facility.

EFFECTIVE DATE. This section is effective retroactively from July 1, 2017.

Sec. 4. Laws 2018, chapter 214, article 4, section 2, subdivision 6, is amended to read:

Subd. 6. **Aquatic and Terrestrial Invasive Species** -0- 5,760,000

(a) Minnesota Invasive Terrestrial Plants and Pests Center - Phase 4

\$3,500,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for high-priority research at the Invasive Terrestrial Plants and Pests Center to protect Minnesota's natural and agricultural resources from terrestrial invasive plants, pathogens, and pests as identified through the center's strategic prioritization process. This appropriation is available until June 30, 2023, by which time the project must be completed and final products delivered.

(b) Palmer Amaranth Detection and Eradication Continuation

\$431,000 the second year is from the trust fund to the commissioner of agriculture to continue to monitor, ground survey, and control Palmer amaranth and other prohibited eradicate species of noxious weeds primarily in ~~conservation plantings~~ natural areas and to develop and implement aerial-survey methods to prevent infestation and protect prairies, other natural areas, and agricultural crops.

(c) Evaluate Control Methods for Invasive Hybrid Cattails

\$131,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Voyageurs National Park to evaluate the effectiveness of mechanical harvesting and managing muskrat populations to remove exotic hybrid cattails and restore fish and wildlife habitat in Minnesota wetlands. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

(d) Developing RNA Interference to Control Zebra Mussels

\$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement

with the United States Geological Survey to develop a genetic control tool that exploits the natural process of RNA silencing to specifically target and effectively control zebra mussels without affecting other species or causing other nontarget effects. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

(e) Install and Evaluate an Invasive Carp Deterrent for Mississippi River Locks and Dams

\$998,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota in cooperation with the United States Army Corps of Engineers and the United States Fish and Wildlife Service to install, evaluate, and optimize a system in Mississippi River locks and dams to deter passage of invasive carp without negatively impacting native fish and to evaluate the ability of predator fish in the pools above the locks and dams to consume young carp. The project must conduct a cost comparison of equipment purchase versus lease options and choose the most effective option. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

(f) Determining Risk of Toxic Alga in Minnesota Lakes

\$200,000 the second year is from the trust fund to the Science Museum of Minnesota for the St. Croix Watershed Research Station to determine the historical distribution, abundance, and toxicity of the invasive blue-green alga, *Cylindrospermopsis raciborskii*, in about 20 lakes across Minnesota and inform managers and the public about the alga's spread and health risks. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

Sec. 5. **EFFECTIVE DATE.**

Sections 1, 2, and 4 are effective the day following final enactment.

**FY2022 - MN Laws 2021, First Special Session,
Chapter 6, Article 6, Section 2**

Environment and Natural Resources Trust Fund Recommendations Summary

LCCMR 2021 RFP

Process for M.L. 2021 (FY2022)

For the FY 2022 and FY 2023 biennium (July 1, 2021 -June 30, 2023), approximately \$71 million is available each year for appropriation from the Environment and Natural Resources Trust Fund (ENRTF).

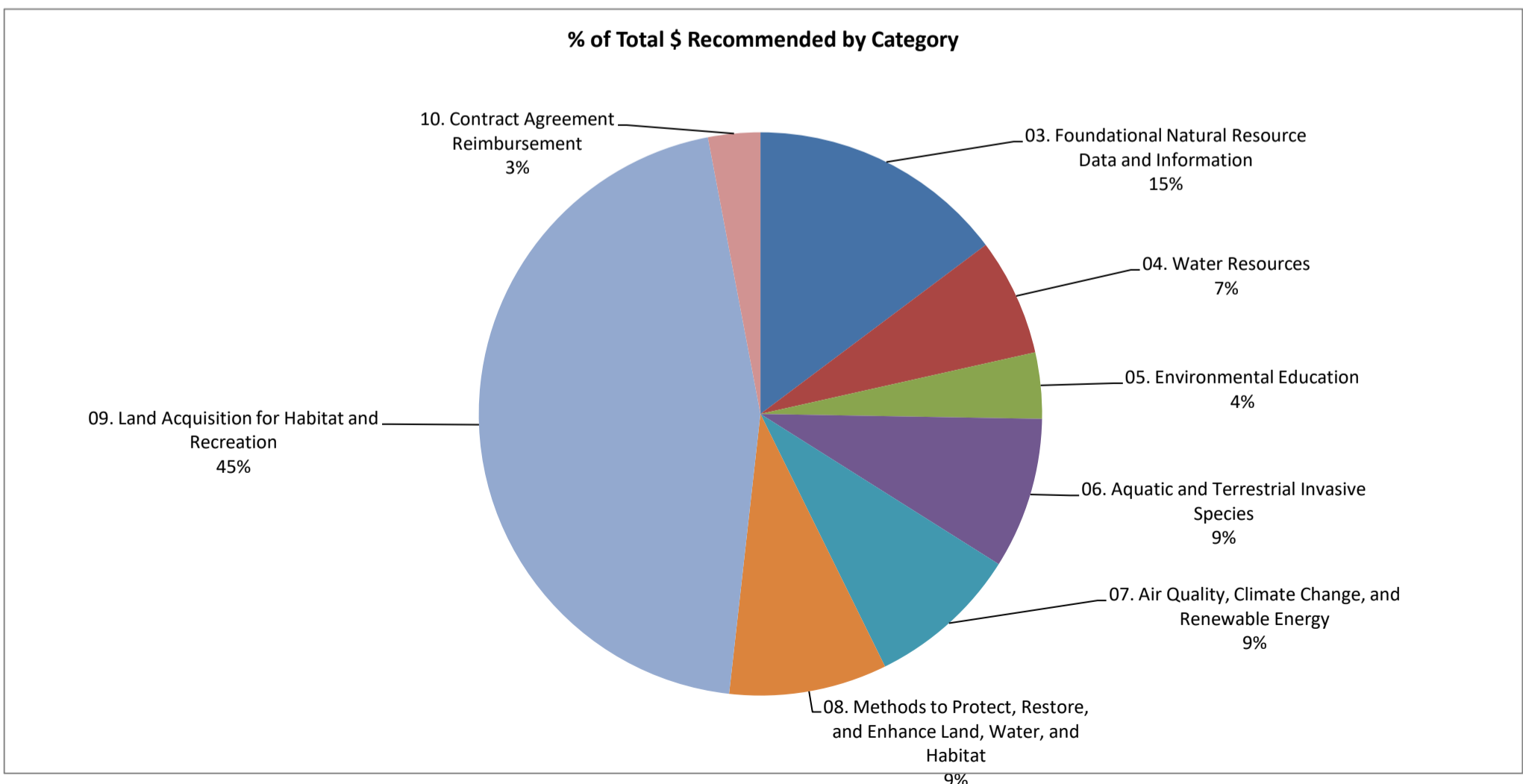
As of November 18, 2020, the Legislative-Citizen Commission on Minnesota Resources (LCCMR) selected 88 projects totaling \$70,881,000 to recommend to the 2021 Minnesota Legislature for funding from the ENRTF. The recommendations are the result of a LCCMR's 2021 Request for Proposal process in which 329 proposals requesting a total of approximately \$240 million were received and considered through a competitive, multi-stage evaluation. The following recommendations range from funding the full proposal and dollar amount requested to partial funding for specific proposal elements.

Check the LCCMR schedule for the most up-to-date information and important process dates.

January 3, 2020	RFP Issued
May 22, 2020*	RFP Proposal Deadline (329 Proposals received totaling ~\$240 million)
June 17-18, 2020	Selection of Proposals for Further Consideration and Presentations
July 7-9 & July 14-16, 2020	Proposal Presentations
August 6-7, 2020	Allocation and Recommendations
August - November, 2020	Recommended Research Projects Undergo Peer Review
November 18, & December 9 & 17, 2020	Appropriation Language Review & Adoption

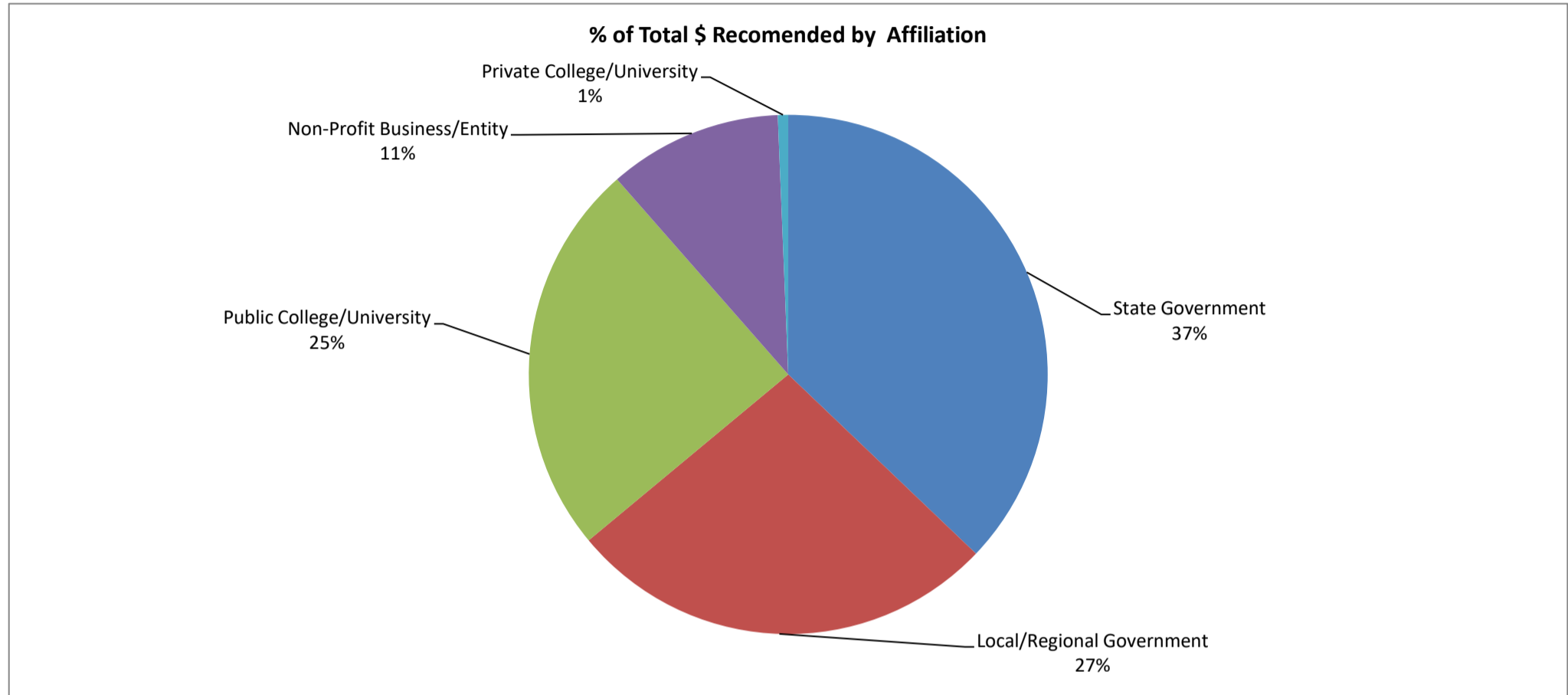
*Deadline extended for 2020 proposals to resubmit

Summary of Recommendations by Category				
Subdivision	\$ Recommended	\$ Percent	# Recommended	# Percent
03. Foundational Natural Resource Data and Information	\$10,459,000	15%	14	16%
04. Water Resources	\$4,771,000	7%	10	11%
05. Environmental Education	\$2,687,000	4%	7	8%
06. Aquatic and Terrestrial Invasive Species	\$6,148,000	9%	7	8%
07. Air Quality, Climate Change, and Renewable Energy	\$6,205,000	9%	6	7%
08. Methods to Protect, Restore, and Enhance Land, Water, and Habitat	\$6,429,000	9%	18	20%
09. Land Acquisition for Habitat and Recreation	\$32,062,000	45%	22	25%
10. Contract Agreement Reimbursement	\$2,120,000	3%	4	5%
Total Request	\$70,881,000	100%	88	100%

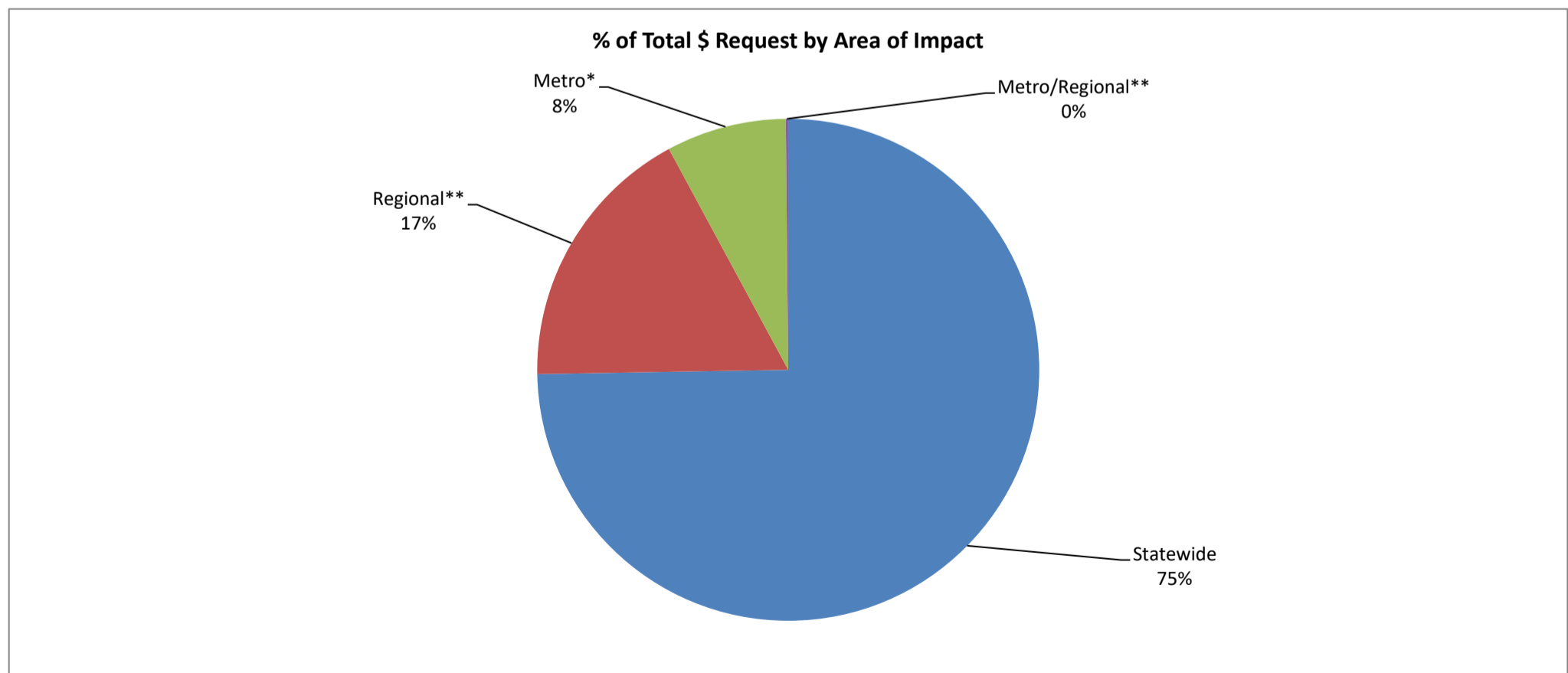


Environment and Natural Resources Trust Fund Recommendations Summary LCCMR 2021 RFP

Summary of Recommendations by Affiliation				
Affiliation Type	\$ Recommendations	\$ Percent	# Recommendations	# Percent
State Government	\$26,313,000	37%	20	23%
Local/Regional Government	\$19,027,000	27%	24	27%
Public College/University	\$17,413,000	25%	27	31%
Non-Profit Business/Entity	\$7,671,000	11%	15	17%
Private College/University	\$457,000	1%	2	2%
Total Request	\$70,881,000	100%	88	100%



Summary of Proposals by Area of Impact				
Areas of Impact	\$ Recommendations	\$ Percent	# Recommendations	# Percent
Statewide	\$52,966,000	75%	61	69%
Regional**	\$12,328,000	17%	18	20%
Metro*	\$5,478,000	8%	8	9%
Metro/Regional**	\$109,000	0%	1	1%
Total Recommendations	\$70,881,000	100%	88	100%



* "Metro" region includes the 11 counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright.
 ** "Regional" means area of impact is less than "Statewide" but includes one or more regions of the state ("Northwest", "Northeast", "Central", "Southwest", or "Southeast") other than the 11-county "Metro" region.

**M.L. 2021 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for RFP 2021/FY 2022**

On June 25, 2021, the Legislature adopted 88 LCCMR recommendations as recommended in 2021. They also added one additional appropriation, primarily using unspent funds from previous projects for \$840,000. On June 29, 2021, 89 appropriations were signed into law by the Governor as M.L. 2021, First Special Session, Chapter 6, Article 6, with \$70,881,000 FY22 and \$840,000 recaptured from prior fiscal years, for \$71,721,000 total appropriations.

Topic Area	Total LCCMR \$ Appropriated	Multiple FY's Reallocated \$	FY2021 Trust Fund \$	Percentage of Total Appropriations
Subd. 03 Foundational Natural Resource Data and Information 14 Appropriations	\$10,459,000	\$0	\$10,459,000	14.58%
Subd. 04 Water Resources 10 Appropriations	\$4,771,000	\$0	\$4,771,000	6.65%
Subd. 05 Environmental Education 7 Appropriations	\$2,687,000	\$0	\$2,687,000	3.75%
Subd. 06 Aquatic and Terrestrial Invasive Species 7 Appropriations	\$6,148,000	\$0	\$6,148,000	8.57%
Subd. 07 Air Quality, Climate Change, and Renewable Energy 6 Appropriations	\$6,205,000	\$0	\$6,205,000	8.65%
Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat 18 Appropriations	\$6,429,000	\$0	\$6,429,000	8.96%
Subd. 09 Land Acquisition, Habitat, and Recreation 22 Appropriations	\$32,062,000	\$0	\$32,062,000	44.70%
Subd. 10 Administrative and Emerging Issues 4 Appropriations	\$2,120,000	\$0	\$2,120,000	2.96%
Subd. 19 Transfers; Natural Resources Research Institute 1 Appropriation (amounts are estimate)	\$840,000	\$840,000	\$0	1.17%
Total Appropriations	\$71,721,000	\$840,000	\$70,881,000	100.00%

Fund Source	\$ Amount
FY 2022 - Environment and Natural Resources Trust Fund (ENRTF)	\$70,881,000
ENRTF Dollars Reallocated from 2019 Appropriations (FY20)- estimate	\$220,000
ENRTF Dollars Reallocated from 2018 Appropriations (FY19)- estimate	\$350,000
ENRTF Dollars Reallocated from 2017 Appropriations (FY18)- estimate	\$270,000
Total \$	\$71,721,000

2021 (FY22) Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2022	TOTAL ENRTF \$ Appropriated
Subd. 03 Foundational Natural Resource Data and Information (14 Projects - Subtotal = \$10,459,000)							
03a	2021-032	What's Bugging Minnesota's Insect-Eating Birds?	U of MN, Duluth - NRRI	Alexis Grinde	\$ -	\$ 199,000	\$ 199,000
03b	2021-055	Protecting Minnesota's Beneficial Macroalgae: All Stoneworts Aren't Starry	MN DNR, Ecological and Water Resources Division	Donna Perleberg	\$ -	\$ 811,000	\$ 811,000
03c	2021-071	County Groundwater Atlas	MN DNR, Ecological and Water Resources Division	Paul Putzier	\$ -	\$ 1,875,000	\$ 1,875,000
03d	2021-087	Improving Resiliency and Conservation Outcomes For Minnesota Turtles	Minnesota Zoological Society	Tricia Markle	\$ -	\$ 391,000	\$ 391,000
03e	2021-113	Minnesota Biological Survey	MN DNR, Ecological and Water Resources Division	Bruce Carlson	\$ -	\$ 1,500,000	\$ 1,500,000
03f	2021-118	Groundwater Contamination Mapping Project - Phase II	Minnesota Pollution Control Agency	Myrna Halbach	\$ -	\$ 800,000	\$ 800,000
03g	2021-138	Geologic Atlases for Water Resource Management	U of MN, MN Geological Survey	Barbara Lusardi	\$ -	\$ 3,092,000	\$ 3,092,000
03h	2021-140	Redwood County Reinvest in Minnesota Easement Evaluation and Public Outreach	Redwood Soil & Water Conservation District	Scott Wold	\$ -	\$ 197,000	\$ 197,000
03i	2021-159	Collaborative State and Tribal Wild Rice Monitoring Program	MN DNR, Ecological and Water Resources Division	Josh Knopik	\$ -	\$ 644,000	\$ 644,000
03j	2021-238	Morrison County Performance Drainage and Hydrology Management II	Morrison Soil and Water Conservation District	Shannon Wettstein	\$ -	\$ 197,000	\$ 197,000
03k	2021-278	Exploring Minnesota's Wetlands: Our Resource For Future Medicine	U of MN, Crookston	Brian Dingmann	\$ -	\$ 210,000	\$ 210,000
03l	2021-289	A Biodiversity Checkup for Minnesota's Big Woods	U of MN, College of Food, Agricultural and Natural Resource Sciences	Lee Frelich	\$ -	\$ 109,000	\$ 109,000
03m	2021-321	Microbiome In Raptors: A New Tool For Conservation	U of MN, Raptor Center	Julia Ponder	\$ -	\$ 129,000	\$ 129,000
03n	2021-396	Bioacoustics for Broad-Scale Species Monitoring and Conservation	U of MN, College of Food, Agricultural and Natural Resource Sciences	Elena West	\$ -	\$ 305,000	\$ 305,000
Subd. 03 Foundational Natural Resource Data and Information Subtotal =					\$ -	\$ 10,459,000	\$ 10,459,000
Subd. 04 Water Resources (10 Projects - Subtotal = \$4,771,000)							
04a	2021-050	Trout Stream Habitat Restoration Success	U of MN, Duluth - NRRI	Valerie Brady	\$ -	\$ 319,000	\$ 319,000
04b	2021-115	Novel Nutrient Recovery Process from Wastewater Treatment Plants	U of MN, College of Food, Agricultural and Natural Resource Sciences	Bo Hu	\$ -	\$ 200,000	\$ 200,000
04c	2021-121	Monitoring Emerging Viruses In Minnesota's Urban Water Cycles	U of MN, College of Biological Sciences	Sebastian Behrens	\$ -	\$ 416,000	\$ 416,000
04d	2021-144	Microgeographic Impact of Antibiotics Released from Identified Hotspots	U of MN, College of Veterinary Medicine	Randall Singer	\$ -	\$ 508,000	\$ 508,000

2021 (FY22) Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2022	TOTAL ENRTF \$ Appropriated
04e	2021-266	Sustainable Irrigation Management: Expanding a Web Application	U of MN, College of Food, Agricultural and Natural Resource Sciences	Bryan Runck	\$ -	\$ 1,139,000	\$ 1,139,000
04f	2021-358	Assessing Membrane Bioreactor Wastewater Treatment Efficacy	Minnesota State Colleges and Universities, St. Cloud State University	Heiko Schoenfuss	\$ -	\$ 419,000	\$ 419,000
04g	2021-364	Evaluating Coronavirus and Other Microbiological Contamination of Drinking Water Sources from Wastewater	U of MN, College of Science and Engineering	Timothy LaPara	\$ -	\$ 594,000	\$ 594,000
04h	2021-376	St. James Pit Water-Level Control Study	City of Aurora	Stefanie Dickinson	\$ -	\$ 259,000	\$ 259,000
04i	2021-384	Long-Term Nitrate Mitigation by Maintaining Profitable Kernza Production	Stearns County Soil and Water Conservation District	Dennis Fuchs	\$ -	\$ 485,000	\$ 485,000
04j	2021-390	Antibiotic Resistance and Wastewater Treatment: Problems And Solutions	University of St. Thomas	Justin Donato	\$ -	\$ 432,000	\$ 432,000
Subd. 04 Water Resources Subtotal =					\$ -	\$ 4,771,000	\$ 4,771,000
Subd. 05 Environmental Education (7 Projects - Subtotal \$2,687,000)							
05a	2021-042	Increasing Outdoor Learning for Young Minnesotans	Wolf Ridge Environmental Learning Center	Peter Smerud	\$ -	\$ 383,000	\$ 383,000
05b	2021-131	Pollinator Education in the Science Classroom	U of MN, College of Food, Agricultural and Natural Resource Sciences	Elaine Evans	\$ -	\$ 366,000	\$ 366,000
05c	2021-132	Minnesota Freshwater Quest: Environmental Education for Youth	Wilderness Inquiry	Julie Edmiston	\$ -	\$ 699,000	\$ 699,000
05d	2021-175	Minnesota Master Naturalist: Nature for New Minnesotans	U of MN, College of Food, Agricultural and Natural Resource Sciences	Robert Blair	\$ -	\$ 293,000	\$ 293,000
05e	2021-186	The Voyageurs Classroom Initiative	Voyageurs National Park Association	Christina Hausman Rhode	\$ -	\$ 348,000	\$ 348,000
05f	2021-320	Restoring Land and Reviving Heritage: Conservation Through Indigenous Culture	Belwin Conservancy	Katie Bloome	\$ -	\$ 420,000	\$ 420,000
05g	2021-323	Expanding Access to Environmental Education for Underserved Communities	U of MN, Raptor Center	Julia Ponder	\$ -	\$ 178,000	\$ 178,000
Subd. 05 Environmental Education Subtotal =					\$ -	\$ 2,687,000	\$ 2,687,000
Subd. 06 Aquatic and Terrestrial Invasive Species (7 Projects - Subtotal = \$6,148,000)							
06a	2021-017	Starch Allocation Patterns of Invasive Starry Stonewort Harvested from Lake Koronis	Minnesota State Colleges and Universities, Minnesota State University Mankato	Ryan Wersal	\$ -	\$ 101,000	\$ 101,000
06b	2021-091	Long-Term Efficacy of Invasive Removal in Floodplain Forests	Macalester College	Mike Anderson	\$ -	\$ 25,000	\$ 25,000
06c	2021-162	Oak Wilt Suppression at the Northern Edge - Phase II	Morrison Soil and Water Conservation District	Shannon Wettstein	\$ -	\$ 423,000	\$ 423,000

2021 (FY22) Environment and Natural Resources Trsut Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2022	TOTAL ENRTF \$ Appropriated
06d	2021-164	Biocontrol of Invasive Species in Bee Lawns and Parklands	U of MN, College of Food, Agricultural and Natural Resource Sciences	Vera Krischik	\$ -	\$ 425,000	\$ 425,000
06e	2021-188	Building Knowledge and Capacity for AIS Solutions	U of MN, MAISRC	Nicholas Phelps	\$ -	\$ 3,750,000	\$ 3,750,000
06f	2021-217	Evaluating Minnesota's Last Best Chance to Stop Carp	U of MN, College of Food, Agricultural and Natural Resource Sciences	Peter Sorensen	\$ -	\$ 424,000	\$ 424,000
06g	2021-313	Stop Starry Invasion with Community Invasive Species Containment	Minnesota Lakes and Rivers Advocates	Jeff Forester	\$ -	\$ 1,000,000	\$ 1,000,000
Subd. 06 Aquatic and Terrestrial Invasive Species Subtotal =					\$ -	\$ 6,148,000	\$ 6,148,000
Subd. 07 Air Quality, Climate Change, and Renewable Energy (6 Projects - Subtotal = \$6,205,000)							
07a	2021-010	Enhanced Thermo-Active Foundations for Space Heating in Minnesota	U of MN, Duluth	Aggrey Mwesigye	\$ -	\$ 312,000	\$ 312,000
07b	2021-169	Storing Renewable Energy in Flow Battery for Grid Use	U of MN, Morris	Bryan Herrmann	\$ -	\$ 2,408,000	\$ 2,408,000
07c	2021-191	Agrivoltaics to Improve the Environment and Farm Resiliency	U of MN, WCROC	Bradley Heins	\$ -	\$ 646,000	\$ 646,000
07d	2021-294	Behavioral Response of Bald Eagles to Acoustic Stimuli	U of MN, St. Anthony Falls Laboratory	Christopher Feist	\$ -	\$ 261,000	\$ 261,000
07e	2021-344	Create Jobs Statewide by Diverting Materials from Landfills	Better Futures Minnesota	Steve Thomas	\$ -	\$ 2,244,000	\$ 2,244,000
07f	2021-402	Strengthening Minnesota's Reuse Economy to Conserve Natural Resources	ReUse Minnesota	Jennifer Kedward	\$ -	\$ 334,000	\$ 334,000
Subd. 07 Air Quality, Climate Change, and Renewable Energy Subtotal =					\$ -	\$ 6,205,000	\$ 6,205,000
Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat (18 Projects - Subtotal = \$6,429,000)							
08a	2021-022	Camp Ripley Sentinel Landscape Forest Restoration and Enhancements	Crow Wing Soil and Water Conservation District	Melissa Barrick	\$ -	\$ 731,000	\$ 731,000
08b	2021-039	Restoring Mussels in Streams and Lakes - Continuation	MN DNR, Ecological and Water Resources Division	Mike Davis	\$ -	\$ 619,000	\$ 619,000
08c	2021-058	Pollinator Central II: Habitat Improvement With Community Monitoring	Great River Greening	Rebecca Tucker	\$ -	\$ 631,000	\$ 631,000
08d	2021-062	Preserving Minnesota's Only Ball Cactus Population	U of MN, Landscape Arboretum	David Remucal	\$ -	\$ 103,000	\$ 103,000
08e	2021-065	Prescribed-Fire Management for Roadside Prairies - Phase II	Minnesota Department of Transportation	Nathan Johnson	\$ -	\$ 217,000	\$ 217,000
08f	2021-084	Restoring Upland Forests for Birds	American Bird Conservancy	Kevin Sheppard	\$ -	\$ 193,000	\$ 193,000
08g	2021-097	Minnesota Green Schoolyards	The Trust for Public Land	Eric Weiss	\$ -	\$ 250,000	\$ 250,000
08h	2021-137	Plumbing the Muddy Depths of Superior Hiking Trail	Superior Hiking Trail Association	Lisa Luokkala	\$ -	\$ 187,000	\$ 187,000
08i	2021-212	Reducing Plastic Pollution with Biodegradable Erosion Control Products	Agricultural Utilization Research Institute	Riley Gordon	\$ -	\$ 200,000	\$ 200,000
08j	2021-223	Remote Sensing and Super-Resolution Imaging of Microplastics	U of MN, St. Anthony Falls Laboratory	Ardeshir Ebtehaj	\$ -	\$ 309,000	\$ 309,000

2021 (FY22) Environment and Natural Resources Trsut Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2022	TOTAL ENRTF \$ Appropriated
08k	2021-229	Woodcrest Trail Expansion	Country Manor Campus, LLC	Sara Gabrielson	\$ -	\$ 16,000	\$ 16,000
08l	2021-231	Urban Pollinator and Native American Cultural Site Restoration	Friends of the Mississippi River	Lisa Mueller	\$ -	\$ 213,000	\$ 213,000
08m	2021-280	Demonstrating Real-World Economic and Soil Benefits of Cover Crops and Alternative Tillage	Redwood Soil & Water Conservation District	Scott Wold	\$ -	\$ 288,000	\$ 288,000
08n	2021-308	Creating Cost-Effective Forage and Management Actions for Pollinators	U of MN, College of Food, Agricultural and Natural Resource Sciences	Daniel Cariveau	\$ -	\$ 198,000	\$ 198,000
08o	2021-322	Shoreline Stabilization, Fishing, and ADA Improvements at Silverwood Park	Three Rivers Park District	Jonathan Vlaming	\$ -	\$ 200,000	\$ 200,000
08p	2021-337	Lawns To Legumes Program - Phase II	Board of Water and Soil Resources	Dan Shaw	\$ -	\$ 993,000	\$ 993,000
08q	2021-375	Reintroducing Bison to Spring Lake Park Reserve	Dakota County	Tom Lewanski	\$ -	\$ 560,000	\$ 560,000
08r	2021-377	Elm Creek Habitat Restoration Final Phase	City of Champlin	Todd Tuominen	\$ -	\$ 521,000	\$ 521,000
Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat Subtotal =					\$ -	\$ 6,429,000	\$ 6,429,000
Subd. 09 Land Acquisition, Habitat, and Recreation (22 Projects - Subtotal = \$32,062,000)							
09a	2021-012	Perham to Pelican Rapids Regional Trail (McDonald Segment)	Otter Tail County	Matthew Yavarow	\$ -	\$ 2,245,000	\$ 2,245,000
09b	2021-028	Mesabi Trail CSAH 88 to Ely	St. Louis & Lake Counties Regional Railroad Authority	Robert Manzoline	\$ -	\$ 1,650,000	\$ 1,650,000
09c	2021-029	Southwest Minnesota Single-Track Trail	Jackson County	Jeremy Bartosh	\$ -	\$ 190,000	\$ 190,000
09d	2021-043	Local Parks, Trails, and Natural Areas Grant Programs	MN DNR, Grants Unit	Audrey Mularie	\$ -	\$ 2,250,000	\$ 2,250,000
09e	2021-049	Metropolitan Regional Parks System Land Acquisition- Phase VII	Metropolitan Council	Jessica Lee	\$ -	\$ 2,250,000	\$ 2,250,000
09f	2021-069	Sauk Rapids Lions Park Riverfront Improvements	City of Sauk Rapids	Todd Schultz	\$ -	\$ 463,000	\$ 463,000
09g	2021-092	City Of Brainerd - Mississippi Landing Trailhead	City of Brainerd	David Chanski	\$ -	\$ 2,850,000	\$ 2,850,000
09h	2021-105	Native Prairie Stewardship and Prairie Bank Easement Acquisition	MN DNR, Ecological and Water Resources Division	Judy Schulte	\$ -	\$ 1,341,000	\$ 1,341,000
09i	2021-109	Moose Lake - Trunk Highway 73 Trail	City of Moose Lake	Katie Bloom	\$ -	\$ 330,000	\$ 330,000
09j	2021-151	SNA Acquisition, Restoration, Citizen-Science and Outreach	MN DNR, Ecological and Water Resources Division	Molly Roske	\$ -	\$ 3,336,000	\$ 3,336,000
09k	2021-154	Precision Acquisition for Restoration, Groundwater Recharge, and Habitat	Shell Rock River Watershed District	Courtney Phillips	\$ -	\$ 467,000	\$ 467,000
09l	2021-222	Lake Brophy Single-Track Trail Expansion	Douglas County	Brad Bonk	\$ -	\$ 100,000	\$ 100,000
09m	2021-325	Veterans on the Lake	Veterans on the Lake	Neil Olson	\$ -	\$ 553,000	\$ 553,000
09n	2021-329	Crane Lake Voyageurs National Park Visitor Center - Continuation	Town of Crane Lake	JoAnn Pohlman	\$ -	\$ 2,700,000	\$ 2,700,000
09o	2021-330	Brookston Campground, Boat Launch, and Outdoor Recreational Facility Planning	City of Brookston	Kaycee Melin	\$ -	\$ 425,000	\$ 425,000
09p	2021-332	Moose and Seven Beaver Multiuse Trails Upgrade	City of Hoyt Lakes	Becky Lammi	\$ -	\$ 900,000	\$ 900,000

2021 (FY22) Environment and Natural Resources Trust Fund (ENRTF) Appropriations
M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2
7/2/21

Subd.	ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2022	TOTAL ENRTF \$ Appropriated
09q	2021-338	Above the Falls Regional Park Acquisition	Minneapolis Parks and Recreation Board	Adam Arvidson	\$ -	\$ 950,000	\$ 950,000
09r	2021-339	Silver Lake Trail Improvement Project	City of Virginia	Britt See-Benes	\$ -	\$ 1,071,000	\$ 1,071,000
09s	2021-362	Minnesota State Trails Development	MN DNR, State Parks and Trails Division	Kent Skaar	\$ -	\$ 4,266,000	\$ 4,266,000
09t	2021-363	Highbanks Ravine Bat Habernaculum Project	City of St. Cloud	Lisa Vollbrecht	\$ -	\$ 825,000	\$ 825,000
09u	2021-371	State Parks and State Trails Inholdings	MN DNR, State Parks and Trails Division	Shelby Kok	\$ -	\$ 2,560,000	\$ 2,560,000
09v	2021-380	Accessible Fishing Piers and Shore Fishing Areas	MN DNR, State Parks and Trails Division	Nancy Stewart	\$ -	\$ 340,000	\$ 340,000
Subd. 09 Land Acquisition, Habitat, and Recreation Subtotal =					\$ -	\$ 32,062,000	\$ 32,062,000
Subd. 10 Administrative and Emerging Issues (4 Projects - Subtotal = \$2,120,000)							
10a	2021-027	Contract Agreement Reimbursement	MN DNR, Grants Unit	Katherine Sherman-Hoehn	\$ -	\$ 135,000	\$ 135,000
10b	2021-464	Legislative-Citizen Commission on Minnesota Resources (LCCMR) Administration	LCCMR	Becca Nash	\$ -	\$ 1,750,000	\$ 1,750,000
10c	2021-466	Emerging Issues Account	LCCMR	Becca Nash	\$ -	\$ 233,000	\$ 233,000
10d	2021-465	Legislative Coordinating Commission (LCC) Administration	LCC	Sally Olson	\$ -	\$ 2,000	\$ 2,000
Subd. 10 Administrative and Emerging Issues Subtotal =					\$ -	\$ 2,120,000	\$ 2,120,000
Subd. 19 Transfers; Natural Resources Research Institute (1 Project - Subtotal = \$840,000)							
19	TBD	Forest Health Research, Development and Demonstration (of which \$500k is for 'Forest management assessment tool')*	UMN- NRRI	John DuPlissis	\$ 840,000	\$ -	\$ 840,000
Subd. 19 Transfers; Natural Resources Research Institute Subtotal =					\$ 840,000	\$ -	\$ 840,000
TOTAL ENRTF \$					\$ 840,000	\$ 70,881,000	\$ 71,721,000

*Estimate amount, pending final close-out of completing projects being transferred

CHAPTER 6--S.F.No. 20

An act relating to state government; appropriating money for environment, natural resources, and tourism; appropriating money from environment and natural resources trust fund; modifying fees and programs; modifying disposition and expenditure of certain funds; creating accounts; authorizing sales and conveyances of certain state land; adding to and deleting from state parks and recreation areas; modifying state land and school trust land provisions; modifying forestry provisions; modifying aquaculture provisions; modifying game and fish laws; modifying Water Law; modifying natural resource and environment provisions; prohibiting PFAS in food packaging; providing for DUI conformity for operating recreational vehicles; requiring rulemaking; requiring reports; making technical corrections; amending Minnesota Statutes 2020, sections 16B.335, subdivision 2; 17.4982, subdivisions 6, 8, 9, 12, by adding subdivisions; 17.4985, subdivisions 2, 3, 5; 17.4986, subdivisions 2, 4; 17.4991, subdivision 3; 17.4992, subdivision 2; 17.4993, subdivision 1; 35.155, subdivision 7, by adding a subdivision; 84.027, subdivisions 13a, 18; 84.415, by adding a subdivision; 84.63; 84.631; 84.795, subdivision 5; 84.82, subdivisions 1a, 7a; 84.83, subdivision 5; 84.943, subdivisions 3, 5; 84.944, subdivision 1; 84.946, subdivision 4; 84D.11, subdivision 1a; 85.019, by adding a subdivision; 85.052, subdivisions 1, 2, 6, by adding a subdivision; 85.053, subdivision 2, by adding a subdivision; 85.054, subdivision 1; 85.43; 85.47; 86B.705, subdivision 2; 89.021, by adding a subdivision; 89.17; 89.37, subdivision 3; 89A.11; 92.50, by adding a subdivision; 92.502; 94.3495, subdivision 3; 97A.065, subdivision 2; 97A.075, subdivisions 1, 7; 97A.126, by adding a subdivision; 97A.401, subdivision 1, by adding a subdivision; 97A.421, subdivision 1, by adding a subdivision; 97A.475, subdivisions 2, 3, 3a, 4; 97A.505, subdivisions 3b, 8; 97B.022, by adding a subdivision; 97B.036; 97B.055, subdivision 2; 97B.086; 97B.715, subdivision 1; 97B.801; 97B.811, subdivision 4a; 97C.005, subdivision 3; 97C.081, subdivisions 3, 3a; 97C.342, subdivision 2; 97C.401, by adding a subdivision; 97C.605, subdivision 3; 97C.611; 97C.805, subdivision 2; 97C.836; 103C.315, subdivision 4; 103G.271, subdivision 4a, by adding a subdivision; 103G.401; 115A.1310, subdivision 12b; 115A.1312, subdivision 1; 115A.1314, subdivision 1; 115A.1316, subdivision 1; 115A.1318, subdivision 2; 115A.1320, subdivision 1; 115A.5501, subdivision 3; 115A.565, subdivision 1; 115B.17, subdivision 13; 115B.406, subdivisions 1, 9; 115B.407; 115B.421; 116.07, subdivision 7, by adding a subdivision; 116G.07, by adding a subdivision; 116G.15, by adding a subdivision; 127A.353, subdivision 4; 169A.20, subdivision 1; 169A.52, by adding a subdivision; 169A.54, by adding a subdivision; 171.306, by adding a subdivision; 290C.01; 290C.04; Laws 2016, chapter 154, sections 16; 48; Laws 2016, chapter 189, article 3, section 3, subdivision 5; Laws 2017, chapter 96, section 2, subdivision 9, as amended; Laws 2018, chapter 214, article 4, section 2, subdivision 6; Laws 2019, First Special Session chapter 4, article 1, sections 2, subdivision 9; 3, subdivisions 4, 5; article 3, section 109, as amended; proposing coding for new law in Minnesota Statutes, chapters 84; 86B; 92; 103F; 103G; 171; 325F; repealing Minnesota Statutes 2020, sections 84.91, subdivision 1; 85.0505, subdivision 3; 85.0507; 85.054, subdivision 19; 86B.331, subdivision 1; 169A.20, subdivisions 1a, 1b, 1c; Minnesota Rules, part 7044.0350.

ARTICLE 6

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND FISCAL YEAR 2022

Section 1. **APPROPRIATIONS.**

The sums shown in the columns marked "Appropriations" are appropriated to the agencies and for the purposes specified in this article. The appropriations are from the environment and natural resources trust fund and are available for the fiscal years indicated for each purpose. The figures "2022" and "2023" used in this article mean that the appropriations listed under them are available for the fiscal year ending June 30, 2022, or June 30, 2023, respectively. "The first year" is fiscal year 2022. "The second year" is fiscal year 2023. "The biennium" is fiscal years 2022 and 2023.

APPROPRIATIONS
Available for the Year
Ending June 30
2022 **2023**

Sec. 2. **MINNESOTA RESOURCES**

<u>Subdivision 1. Total Appropriation</u>	<u>\$</u>	<u>70,881,000</u>	<u>\$</u>	<u>-0-</u>
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The amounts that may be spent for each purpose are specified in the following subdivisions. Appropriations in the first year are available for three years beginning July 1, 2021, unless otherwise stated in the appropriation. Any unencumbered balance remaining in the first year does not cancel and is available for the second year or until the end of the appropriation.

Subd. 2. **Definition**

"Trust fund" means the Minnesota environment and natural resources trust fund established under the Minnesota Constitution, article XI, section 14.

Subd. 3. **Foundational Natural Resource Data and Information**

		<u>10,459,000</u>		<u>-0-</u>
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(a) What's Bugging Minnesota's Insect-Eating Birds?

\$199,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute to examine the relationship between insect abundance, timing of insect availability, and breeding success for multiple bird species across land-use intensities to develop comprehensive guidelines to conserve bird and insect diversity.

(b) Protecting Minnesota's Beneficial Macroalgae: All Stoneworts Aren't Starry

\$811,000 the first year is from the trust fund to the commissioner of natural resources to conduct a statewide inventory to provide baseline data and build in-state knowledge of Minnesota's native stoneworts, a diverse group of aquatic plants that support clear lakes and healthy fish habitat.

(c) County Groundwater Atlas

\$1,875,000 the first year is from the trust fund to the commissioner of natural resources to continue producing county groundwater atlases to inform management of surface water and groundwater resources for drinking and other purposes. This appropriation is for Part B, to characterize the potential water yields of aquifers and aquifers' sensitivity to contamination.

(d) Improving Resiliency and Conservation Outcomes for Minnesota Turtles

\$391,000 the first year is from the trust fund to the Minnesota Zoological Garden to improve the conservation of Minnesota's imperiled turtles through animal husbandry, field conservation, and educational programming. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(e) Minnesota Biological Survey

\$1,500,000 the first year is from the trust fund to the commissioner of natural resources to complete the statewide baseline biological survey by finalizing data, analyses, and publications and by conducting targeted field surveys to fill missing gaps of information needed to support conservation of Minnesota's biodiversity. Any revenues generated through the publication of books or other resources created through this appropriation may be reinvested as described in the work plan approved by the Legislative-Citizen Commission on Minnesota Resources according to Minnesota Statutes, section 116P.10.

(f) Groundwater Contamination Mapping Project - Phase II

\$800,000 the first year is from the trust fund to the commissioner of the Pollution Control Agency to improve protection of groundwater resources for drinking water by expanding the web-based interactive groundwater contamination mapping system to include all other state hazardous and solid waste cleanup programs and by upgrading the system to collect monitoring data.

(g) Geologic Atlases for Water Resource Management

\$3,092,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, Minnesota Geological Survey, to continue producing county geologic atlases to inform management of surface water and groundwater resources. This appropriation is to complete Part A, which focuses on the properties and distribution of earth materials to define aquifer boundaries and the connection of aquifers to the land surface and surface water resources.

(h) Redwood County Reinvest in Minnesota Easement Evaluation and Public Outreach

\$197,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Redwood County for the Redwood Soil and Water Conservation District to inventory vegetation, evaluate wetland conditions, and create a countywide stewardship plan for lands protected with permanent conservation easements. This appropriation may also be spent to conduct outreach to volunteers and landowners on effective prairie and wetland habitat management.

(i) Collaborative State and Tribal Wild Rice Monitoring Program

\$644,000 the first year is from the trust fund to the commissioner of natural resources to work with Tribal partners to create a collaborative and comprehensive monitoring program to conserve wild-rice waters, develop remote sensing tools for statewide estimates of wild rice coverage, and collect consistent field data on wild rice health and abundance.

(j) Morrison County Performance Drainage and Hydrology Management II

\$197,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Morrison Soil and Water Conservation District to complete the Morrison County culvert inventory started in 2016 to help solve landowner conflicts, protect wetlands, improve water quality, and design additional water storage throughout the county.

(k) Exploring Minnesota's Wetlands: Our Resource for Future Medicine

\$210,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, Crookston, to work with White Earth Tribal and Community College to catalog bog microbe diversity in Minnesota's ecoregions, test for potential antibiotic-producing microorganisms, and establish methods to enhance any antibiotic cultures discovered.

(l) A Biodiversity Checkup for Minnesota's Big Woods

\$109,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to inform conservation strategies by comparing the historic and contemporary flora of Minnesota's Big Woods to determine if all species have survived in the small remaining remnants of that ecosystem.

(m) Microbiome in Raptors: A New Tool for Conservation

\$129,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Raptor Center to improve wildlife care and environmental stewardship by evaluating the impact of antibiotics administered during captivity on raptor gut microbiome, rehabilitation success, and the potential spread of antimicrobial resistance in the natural environment.

(n) Bioacoustics for Broad-Scale Species Monitoring and Conservation

\$305,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to

improve wildlife conservation efforts by using passive acoustic monitoring devices to determine statewide distribution and reproduction of red-headed woodpeckers and developing a protocol for future use of this technology to monitor population trends and responses to habitat management. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

Subd. 4. Water Resources

4,771,000

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(a) Trout Stream Habitat Restoration Success

\$319,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute to evaluate the effectiveness and durability of previous trout stream habitat restoration projects to improve the success and cost effectiveness of future projects. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(b) Novel Nutrient Recovery Process from Wastewater Treatment Plants

\$200,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to conduct lab- and pilot-scale tests of a new process to promote nutrient removal and recovery at rural municipal and industrial wastewater treatment plants for water protection and renewable energy production.

(c) Monitoring Emerging Viruses in Minnesota's Urban Water Cycles

\$416,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to develop rapid testing, quantification, and human exposure risk assessment models for enveloped viruses such as coronaviruses in urban wastewater and drinking water treatment processes.

(d) Microgeographic Impact of Antibiotics Released from Identified Hotspots

\$508,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to inform protection of environmental, animal, and human

health from proliferation of antibiotic resistance by quantifying and mapping the extent of antibiotic spread in waters and soils from locations identified as release hot spots.

(e) Sustainable Irrigation Management: Expanding a Web Application

\$1,139,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to promote responsible use of Minnesota's groundwater resources by expanding an existing irrigation management assistance tool into a mobile-compatible web application for the top agricultural-producing counties in the state. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(f) Assessing Membrane Bioreactor Wastewater Treatment Efficacy

\$419,000 the first year is from the trust fund to the Board of Trustees of the Minnesota State Colleges and Universities system for St. Cloud State University to conduct a comprehensive assessment of membrane bioreactor treatment of wastewater to inform managers of options for updating or replacing aging wastewater infrastructure.

(g) Evaluating Coronavirus and Other Microbiological Contamination of Drinking Water Sources from Wastewater

\$594,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to survey public and private wells to identify sources of and evaluate solutions to microbiological contamination of drinking water sources by wastewater, including from the virus that causes COVID-19.

(h) St. James Pit Water-Level Control Study

\$259,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Aurora to install sampling wells and conduct a study to determine appropriate mitigation of the abandoned St. James pit mine to protect surface

and drinking water and prevent harm to homes and residents.

(i) Long-Term Nitrate Mitigation by Maintaining Profitable Kernza Production

\$485,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Stearns County Soil and Water Conservation District to evaluate the effectiveness of aging Kernza stands on water quality and to continue to develop a sustainable supply chain with a focus on post-harvest processing of Kernza for water protection and local economies.

(j) Antibiotic Resistance and Wastewater Treatment: Problems and Solutions

\$432,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the University of St. Thomas to quantify the ability of full-scale wastewater treatment plants to eliminate antibiotic resistance genes entering or created in the water treatment process before these genes are released into the natural environment.

Subd. 5. Environmental Education

2,687,000

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(a) Increasing Outdoor Learning for Young Minnesotans

\$383,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Wolf Ridge Environmental Learning Center to provide scholarships for equitable access to hands-on learning experiences in the outdoors related to outdoor recreation, air and energy, water, habitat, and fish and wildlife. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(b) Pollinator Education in the Science Classroom

\$366,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to educate approximately 5,000 students about pollinator conservation by providing professional development for science teachers to integrate pollinator education

curriculum and materials into their classrooms and by evaluating the program to improve its effectiveness.

(c) Minnesota Freshwater Quest: Environmental Education for Youth

\$699,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Wilderness Inquiry to provide place-based STEM environmental education to approximately 15,000 diverse and underserved Minnesota youth through exploration of local ecosystems and waterways in the Minnesota Freshwater Quest program.

(d) Minnesota Master Naturalist: Nature for New Minnesotans

\$293,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota in partnership with English-language-learning organizations to adapt and incorporate materials developed for Minnesota Master Naturalists into English-language-learning programs to introduce immigrants and English-language learners to Minnesota's great outdoors.

(e) The Voyageurs Classroom Initiative

\$348,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Voyageurs Conservancy to launch a new initiative to connect Minnesota youth, young adults, and their families to Voyageurs National Park by learning about the park's waters, wildlife, and forests and by engaging in the park's preservation.

(f) Restoring Land and Reviving Heritage: Conservation Through Indigenous Culture

\$420,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Belwin Conservancy in partnership with Anishinabe Academy to conduct environmental education programming that incorporates ecology and indigenous land traditions and to restore an ecologically significant area of land using modern scientific standards and traditional ecological knowledge.

(g) Expanding Access to Environmental Education for Underserved Communities

\$178,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Raptor Center to build environmental literacy and engagement by delivering an environmental education program featuring live raptors and standards-based curriculum to approximately 300 classrooms in underserved communities throughout Minnesota.

Subd. 6. Aquatic and Terrestrial Invasive Species6,148,000-0-**(a) Starch Allocation Patterns of Invasive Starry Stonewort Harvested from Lake Koronis**

\$101,000 the first year is from the trust fund to the Board of Trustees of the Minnesota State Colleges and Universities System for Minnesota State University, Mankato, to evaluate the starch allocation patterns of the invasive starry stonewort to identify weaknesses in the plant's growth that could be targeted for management.

(b) Long-Term Efficacy of Invasive Removal in Floodplain Forests

\$25,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Macalester College to begin a long-term scientific study at the Ordway Field Station to provide information to land managers on protecting Minnesota's floodplain forests from combined threats of overabundant deer, invasive shrubs, and earthworms. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered. A report on the results of the long-term study must be submitted at the end of the appropriation and an update must be submitted five years after the appropriation ends or at the study's conclusion, whichever is first.

(c) Oak Wilt Suppression at the Northern Edge - Phase II

\$423,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Morrison Soil and Water Conservation District

to continue to eradicate the northernmost occurrences of oak wilt in the state through mechanical means on select private properties to prevent oak wilt's spread to healthy state forests.

(d) Biocontrol of Invasive Species in Bee Lawns and Parklands

\$425,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to establish a biocontrol program to manage the invasive Japanese beetle in a way that reduces insecticide use in bee lawns and pollinator restorations and the associated economic and environmental costs to wildlife and humans.

(e) Building Knowledge and Capacity for AIS Solutions

\$3,750,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Minnesota Aquatic Invasive Species Research Center to conduct high-priority projects aimed at solving Minnesota's aquatic invasive species problems using rigorous science and a collaborative process. Additionally, the appropriation may be spent to deliver research findings to end users through strategic communication and outreach. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(f) Evaluating Minnesota's Last Best Chance to Stop Carp

\$424,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, in cooperation with the United States Army Corps of Engineers and the Department of Natural Resources, to evaluate invasive carp passage and the costs, processes, and potential for a state-of-the-art deterrent system installed at Mississippi River Lock and Dam Number 5 to impede passage of invasive carp at this location to protect the upper river.

(g) Stop Starry Invasion with Community Invasive Species Containment

\$1,000,000 the first year is from the trust fund to the commissioner of natural resources for an agreement

with Minnesota Lakes and Rivers Advocates to work with civic leaders to purchase, install, and operate waterless cleaning stations for watercraft; conduct aquatic invasive species education; and implement education upgrades at public accesses to prevent invasive starry stonewort spread beyond the 16 lakes already infested. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

Subd. 7. Air Quality, Climate Change, and Renewable Energy

6,205,000

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(a) Enhanced Thermo-Active Foundations for Space Heating in Minnesota

\$312,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, Duluth, to design and optimize cost-competitive thermally enhanced heat exchanger systems for use in building foundations to improve energy efficiency and conservation of natural resources in Minnesota's cold climate.

(b) Storing Renewable Energy in Flow Battery for Grid Use

\$2,408,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, Morris, to implement a rural, community-scale project that demonstrates how a large flow battery connected to solar and wind generation improves grid stability and enhances use of renewable energy.

(c) Agrivoltaics to Improve the Environment and Farm Resiliency

\$646,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, West Central Research and Outreach Center, Morris, to model and evaluate alternative solar energy system designs to maximize energy production while providing other benefits to cattle and farmers.

(d) Behavioral Response of Bald Eagles to Acoustic Stimuli

\$261,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, St. Anthony Falls Laboratory, to protect wildlife by designing and implementing an acoustic deterrence protocol to discourage bald eagles from entering hazardous air space near wind energy installations.

(e) Create Jobs Statewide by Diverting Materials from Landfills

\$2,244,000 the first year is from the trust fund to the commissioner of natural resources for agreements with Better Futures Minnesota and the Natural Resources Research Institute to partner with cities, counties, and businesses to create and implement a collection, restoration, reuse, and repurpose program that diverts used household goods and building materials from entering the waste stream and thereby reduces greenhouse gas emissions. Net income generated by Better Futures Minnesota as part of this appropriation may be reinvested in the project if a plan for reinvestment is approved in the work plan.

(f) Strengthening Minnesota's Reuse Economy to Conserve Natural Resources

\$334,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with ReUSE Minnesota to provide outreach and technical assistance to communities and small businesses to increase reuse, rental, and repair of consumer goods as an alternative to using new materials; to reduce solid-waste disposal impacts; and to create more local reuse jobs. A fiscal management and staffing plan must be approved in the work plan before any trust fund dollars are spent.

Subd. 8. Methods to Protect, Restore, and Enhance Land, Water, and Habitat

6,429,000

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(a) Camp Ripley Sentinel Landscape Forest Restoration and Enhancements

\$731,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Crow Wing Soil and Water Conservation District to partner with the Nature Conservancy and Great River Greening to develop forest stewardship

plans, restore habitat, and conduct prescribed burns to advance forest restoration and enhancement on public and private lands within an approximate ten-mile radius around Camp Ripley. Notwithstanding subdivision 13, paragraph (e), this appropriation may be spent on forest management plans, fires, and restoration on lands with a long-term contract commitment for forest conservation. The restoration must follow the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines.

(b) Restoring Mussels in Streams and Lakes - Continuation

\$619,000 the first year is from the trust fund to the commissioner of natural resources to restore native freshwater mussel assemblages and the ecosystem services they provide in the Mississippi, Cedar, and Cannon Rivers and to inform the public on mussels and mussel conservation.

(c) Pollinator Central II: Habitat Improvement With Community Monitoring

\$631,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Great River Greening to restore and enhance pollinator habitat in the metropolitan area to benefit pollinators and people and to build knowledge of the impact through community-based monitoring.

(d) Preserving Minnesota's Only Ball Cactus Population

\$103,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota for the Minnesota Landscape Arboretum to move the only known remaining ball cactus population in the state from private to protected land and to propagate and bank ball cactus seeds for education and preservation.

(e) Prescribed-Fire Management for Roadside Prairies - Phase II

\$217,000 the first year is from the trust fund to the commissioner of transportation to continue to protect biodiversity and enhance pollinator habitat on roadsides by helping to create a self-sufficient

prescribed-fire program at the Department of Transportation.

(f) Restoring Upland Forests for Birds

\$193,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the American Bird Conservancy to restore deciduous forest in partnership with Aitkin, Beltrami, and Cass Counties using science-based best management practices to rejuvenate noncommercial stands for focal wildlife species.

(g) Minnesota Green Schoolyards

\$250,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with The Trust for Public Land to assess, promote, and demonstrate how schoolyards can be adapted to improve water, air, and habitat quality and to foster next-generation environmental stewards while improving health, education, and community outcomes.

(h) Plumbing the Muddy Depths of Superior Hiking Trail

\$187,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Superior Hiking Trail Association to install and implement water management practices to prevent erosion and improve access to the Superior Hiking Trail.

(i) Reducing Plastic Pollution with Biodegradable Erosion Control Products

\$200,000 the first year is from the trust fund to the Agricultural Utilization Research Institute in partnership with the Departments of Transportation, Agriculture, and Natural Resources to demonstrate use of regionally grown industrial hemp to create biodegradable alternatives to plastic-based erosion and sediment control products used in transportation construction projects.

(j) Remote Sensing and Super-Resolution Imaging of Microplastics

\$309,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota, St. Anthony Falls Laboratory, to develop and test remote sensing techniques for cost-effective monitoring of microplastics in lakes, rivers, and streams as well as in wastewater treatment plants. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(k) Woodcrest Trail Expansion

\$16,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Foundation for Health Care Continuum, doing business as Country Manor Campus, LLC, to construct a trail for public recreational use on land owned by the senior living facility in central Minnesota.

(l) Urban Pollinator and Native American Cultural Site Restoration

\$213,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Friends of the Mississippi River to restore three urban natural areas, including an iconic Native American cultural site, to native prairie and forest with a focus on important pollinator and culturally significant native plants.

(m) Demonstrating Real-World Economic and Soil Benefits of Cover Crops and Alternative Tillage

\$288,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Redwood County for the Redwood Soil and Water Conservation District to increase farmer adoption of conservation practices by demonstrating soil improvements and cost savings of cover crops and alternative tillage compared to conventional practices on working farms. This appropriation is available until June 30, 2025, by which time the project must be completed and final products delivered.

(n) Creating Cost-Effective Forage and Management Actions for Pollinators

\$198,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota to

evaluate pollinator forage across time and in response to burning and mowing and to design an open-access web-based tool to share these data for land managers across Minnesota to inform restoration seed mix selection.

(o) Shoreline Stabilization, Fishing, and ADA Improvements at Silverwood Park

\$200,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Three Rivers Park District to provide water quality improvements through shoreline stabilization, shoreline fishing improvements, and shoreline ADA access on the island in Silver Lake within Silverwood Park.

(p) Lawns to Legumes Program - Phase II

\$993,000 the first year is from the trust fund to the Board of Water and Soil Resources to provide grants, cost-sharing, and technical assistance to plant residential lawns, community parks, and school landscapes with native vegetation and pollinator-friendly forbs and legumes to protect a diversity of pollinators. Notwithstanding subdivision 13, paragraph (e), this appropriation may be spent on pollinator plantings on lands with a long-term commitment from the landowner.

(q) Reintroducing Bison to Spring Lake Park Reserve

\$560,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Dakota County, in partnership with the Minnesota Bison Conservation Herd, to establish the holding facilities and infrastructure needed to reintroduce American plains bison (*Bison bison*) to improve the resiliency and biodiversity of the prairie at Spring Lake Park Reserve.

(r) Elm Creek Habitat Restoration Final Phase

\$521,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Champlin to conduct habitat and stream restoration in Elm Creek upstream of Mill Ponds.

Subd. 9. Land Acquisition, Habitat, and Recreation**32,062,000****-0-****(a) Perham to Pelican Rapids Regional Trail (McDonald Segment)**

\$2,245,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Otter Tail County to construct the McDonald Segment of the Perham to Pelican Rapids Regional Trail to connect the cities of Perham and Pelican Rapids to Maplewood State Park.

(b) Mesabi Trail CSAH 88 to Ely

\$1,650,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the St. Louis and Lake Counties Regional Railroad Authority to acquire, engineer, and construct a segment of the Mesabi Trail beginning at the intersection of County State-Aid Highway 88 toward Ely.

(c) Southwest Minnesota Single-Track Trail

\$190,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Jackson County to create a single-track mountain bike trail and expand an associated parking lot in Belmont County Park to address a lack of opportunity for this kind of outdoor recreation in southwest Minnesota.

(d) Local Parks, Trails, and Natural Areas Grant Programs

\$2,250,000 the first year is from the trust fund to the commissioner of natural resources to solicit and rank applications for and fund competitive matching grants for local parks, trail connections, and natural and scenic areas under Minnesota Statutes, section 85.019. Priority must be given to funding projects in the metropolitan area or in other areas of southern Minnesota. For purposes of this paragraph, southern Minnesota is defined as the area of the state south of and including St. Cloud. This appropriation is for local nature-based recreation, connections to regional and state natural areas, and recreation facilities and may

not be used for athletic facilities such as sport fields, courts, and playgrounds.

(e) Metropolitan Regional Parks System Land Acquisition - Phase VII

\$2,250,000 the first year is from the trust fund to the Metropolitan Council for grants to acquire land within the approved park boundaries of the metropolitan regional park system. This appropriation must be matched by an equal amount from a combination of Metropolitan Council and local agency funds.

(f) Sauk Rapids Lions Park Riverfront Improvements

\$463,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Sauk Rapids to design and construct a second phase of upgrades to Lions and Southside Parks including trails, lighting, riverbank restoration, and a canoe and kayak launch to enhance access to the Mississippi River.

(g) City of Brainerd - Mississippi Landing Trailhead

\$2,850,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Brainerd to design and construct Mississippi Landing Trailhead Park to help connect residents and visitors to the Mississippi River through recreation, education, and restoration.

(h) Native Prairie Stewardship and Prairie Bank Easement Acquisition

\$1,341,000 the first year is from the trust fund to the commissioner of natural resources to provide technical stewardship assistance to private landowners, restore and enhance native prairie protected by easements in the native prairie bank, and acquire easements for the native prairie bank in accordance with Minnesota Statutes, section 84.96, including preparing initial baseline property assessments. Up to \$60,000 of this appropriation may be deposited in the natural resources conservation easement stewardship account created in Minnesota Statutes, section 84.69, proportional to the number of easement acres acquired.

(i) Moose Lake - Trunk Highway 73 Trail

\$330,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Moose Lake to design and construct a nonmotorized recreational trail in an off-street pedestrian corridor along Highway 73 to connect to several existing regional trails in the Moose Lake area.

(j) SNA Acquisition, Restoration, Citizen-Science, and Outreach

\$3,336,000 the first year is from the trust fund to the commissioner of natural resources for the scientific and natural areas (SNA) program to restore, improve, and enhance wildlife habitat on SNAs; increase public involvement and outreach; and strategically acquire lands that meet criteria for SNAs under Minnesota Statutes, section 86A.05, from willing sellers.

(k) Precision Acquisition for Restoration, Groundwater Recharge, and Habitat

\$467,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Shell Rock River Watershed District to acquire and restore to wetland a key parcel of land to reduce downstream flooding while providing water storage, groundwater recharge, nutrient reduction, and pollinator and wildlife habitat.

(l) Lake Brophy Single-Track Trail Expansion

\$100,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Douglas County in partnership with the Big Ole Bike Club to design and build new expert single-track segments and an asphalt pump track for the existing trail system at Lake Brophy Park to improve outdoor recreation experiences in west-central Minnesota.

(m) Veterans on the Lake

\$553,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Lake County for Veterans on the Lake to conduct accessibility upgrades to Veterans on the Lake's existing trails, roadway, and buildings to improve

access to the wilderness and outdoor recreation for disabled American veterans.

(n) Crane Lake Voyageurs National Park Visitor Center - Continuation

\$2,700,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Crane Lake to design and construct an approximate 4,500 to 7,000 square-foot visitor center building to serve as an access point to Voyageurs National Park. A fiscal agent or fiscal management plan must be approved in the work plan before any trust fund money is spent. A copy of a resolution or other documentation of the city's commitment to fund operations of the visitor center must be included in the work plan submitted to the Legislative-Citizen Commission on Minnesota Resources.

(o) Brookston Campground, Boat Launch, and Outdoor Recreational Facility Planning

\$425,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Brookston to design a campground, boat launch, and outdoor recreation area on the banks of the St. Louis River in northeastern Minnesota. A fiscal agent must be approved in the work plan before any trust fund dollars are spent.

(p) Moose and Seven Beaver Multiuse Trails Upgrade

\$900,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Hoyt Lakes, in partnership with the Ranger Snowmobile and ATV Club, to design and construct upgrades and extensions to the Moose and Seven Beaver multiuse trails to enhance access for recreation use and connect to regional trails.

(q) Above the Falls Regional Park Acquisition

\$950,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Minneapolis Parks and Recreation Board to develop a restoration plan and acquire approximately 3.25 acres of industrial land for public access and

habitat connectivity along the Mississippi River as part of Above the Falls Regional Park.

(r) Silver Lake Trail Improvement Project

\$1,071,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Virginia to reconstruct and renovate the walking trail around Silver Lake to allow safe multimodal transportation between schools, parks, community recreation facilities, and other community activity centers in downtown Virginia.

(s) Minnesota State Trails Development

\$4,266,000 the first year is from the trust fund to the commissioner of natural resources to expand recreational opportunities on Minnesota state trails by rehabilitating and enhancing existing state trails and replacing or repairing existing state trail bridges. Priority must be given to funding projects in the metropolitan area or in other areas of southern Minnesota. For purposes of this paragraph, southern Minnesota is defined as the area of the state south of and including St. Cloud.

(t) Highbanks Ravine Bat Hibernaculum Project

\$825,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of St. Cloud to reroute and upgrade an existing stormwater system in the Highbanks Ravine area to improve an existing bat hibernaculum, reduce erosion, and create additional green space for wildlife habitat.

(u) State Parks and State Trails Inholdings

\$2,560,000 the first year is from the trust fund to the commissioner of natural resources to acquire high-priority inholdings from willing sellers within the legislatively authorized boundaries of state parks, recreation areas, and trails to protect Minnesota's natural heritage, enhance outdoor recreation, and improve the efficiency of public land management.

(v) Accessible Fishing Piers and Shore Fishing Areas

\$340,000 the first year is from the trust fund to the commissioner of natural resources to provide accessible fishing piers and develop shore fishing sites to serve new angling communities, underserved populations, and anglers with disabilities.

Subd. 10. Administrative and Emerging Issues

2,120,000

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(a) Contract Agreement Reimbursement

\$135,000 the first year is from the trust fund to the commissioner of natural resources, at the direction of the Legislative-Citizen Commission on Minnesota Resources, for expenses incurred in preparing and administering contracts for the agreements specified in this section. The commissioner must provide documentation to the Legislative-Citizen Commission on Minnesota Resources on the expenditure of these funds.

(b) Legislative-Citizen Commission on Minnesota Resources (LCCMR) Administration

\$1,750,000 the first year is from the trust fund to the Legislative-Citizen Commission on Minnesota Resources for administration in fiscal years 2022 and 2023 as provided in Minnesota Statutes, section 116P.09, subdivision 5. This appropriation is available until June 30, 2023. Notwithstanding Minnesota Statutes, section 116P.11, paragraph (b), Minnesota Statutes, section 16A.281, applies to this appropriation.

(c) Emerging Issues Account

\$233,000 the first year is from the trust fund to an emerging issues account authorized in Minnesota Statutes, section 116P.08, subdivision 4, paragraph (d).

(d) Legislative Coordinating Commission (LCC) Administration

\$2,000 the first year is from the trust fund to the Legislative Coordinating Commission for the website required in Minnesota Statutes, section 3.303, subdivision 10.

Subd. 11. Availability of Appropriations

Money appropriated in this section may not be spent on activities unless they are directly related to and necessary for a specific appropriation and are specified in the work plan approved by the Legislative-Citizen Commission on Minnesota Resources. Money appropriated in this section must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for a specific appropriation. Costs that are directly related to and necessary for an appropriation, including financial services, human resources, information services, rent, and utilities, are eligible only if the costs can be clearly justified and individually documented specific to the appropriation's purpose and would not be generated by the recipient but for receipt of the appropriation. No broad allocations for costs in either dollars or percentages are allowed. Unless otherwise provided, the amounts in this section are available until June 30, 2024, when projects must be completed and final products delivered. For acquisition of real property, the appropriations in this section are available for an additional fiscal year if a binding contract for acquisition of the real property is entered into before the expiration date of the appropriation. If a project receives a federal grant, the period of the appropriation is extended to equal the federal grant period.

Subd. 12. Data Availability Requirements

Data collected by the projects funded under this section must conform to guidelines and standards adopted by Minnesota IT Services. Spatial data must also conform to additional guidelines and standards designed to support data coordination and distribution that have been published by the Minnesota Geospatial Information Office. Descriptions of spatial data must be prepared as specified in the state's geographic metadata guideline and must be submitted to the Minnesota Geospatial Information Office. All data must be accessible and free to the public unless made private under the Data Practices Act, Minnesota Statutes, chapter 13. To the extent practicable, summary data and results of projects funded under this section should be readily accessible on the Internet and identified as having received funding from the environment and natural resources trust fund.

Subd. 13. Project Requirements

(a) As a condition of accepting an appropriation under this section, an agency or entity receiving an appropriation or a party to an agreement from an appropriation must comply with paragraphs (b) to (l) and Minnesota Statutes, chapter 116P, and must submit a work plan and annual or semiannual progress reports in the form determined by the Legislative-Citizen Commission on Minnesota Resources for any project funded in whole or in part with funds from the appropriation. Modifications to the approved work plan and budget expenditures must be made through the amendment process established by the Legislative-Citizen Commission on Minnesota Resources.

(b) A recipient of money appropriated in this section that conducts a restoration using funds appropriated in this section must use native plant species according to the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines and include an appropriate diversity of native species selected to provide habitat for pollinators throughout the growing season as required under Minnesota Statutes, section 84.973.

(c) For all restorations conducted with money appropriated under this section, a recipient must prepare an ecological restoration and management plan that, to the degree practicable, is consistent with the highest-quality conservation and ecological goals for the restoration site. Consideration should be given to soil, geology, topography, and other relevant factors that would provide the best chance for long-term success and durability of the restoration project. The plan must include the proposed timetable for implementing the restoration, including site preparation, establishment of diverse plant species, maintenance, and additional enhancement to establish the restoration; identify long-term maintenance and management needs of the restoration and how the maintenance, management, and enhancement will be financed; and take advantage of the best-available science and include innovative techniques to achieve the best restoration.

(d) An entity receiving an appropriation in this section for restoration activities must provide an initial

restoration evaluation at the completion of the appropriation and an evaluation three years after the completion of the expenditure. Restorations must be evaluated relative to the stated goals and standards in the restoration plan, current science, and, when applicable, the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines. The evaluation must determine whether the restorations are meeting planned goals, identify any problems with implementing the restorations, and, if necessary, give recommendations on improving restorations. The evaluation must be focused on improving future restorations.

(e) All restoration and enhancement projects funded with money appropriated in this section must be on land permanently protected by a conservation easement or public ownership.

(f) A recipient of money from an appropriation under this section must give consideration to contracting with Conservation Corps Minnesota for contract restoration and enhancement services.

(g) All conservation easements acquired with money appropriated under this section must:

(1) be permanent;

(2) specify the parties to an easement in the easement;

(3) specify all provisions of an agreement that are permanent;

(4) be sent to the Legislative-Citizen Commission on Minnesota Resources in an electronic format at least ten business days before closing;

(5) include a long-term monitoring and enforcement plan and funding for monitoring and enforcing the easement agreement; and

(6) include requirements in the easement document to protect the quantity and quality of groundwater and surface water through specific activities such as keeping water on the landscape, reducing nutrient and contaminant loading, and not permitting artificial hydrological modifications.

(h) For any acquisition of lands or interest in lands, a recipient of money appropriated under this section must not agree to pay more than 100 percent of the

appraised value for a parcel of land using this money to complete the purchase, in part or in whole, except that up to ten percent above the appraised value may be allowed to complete the purchase, in part or in whole, using this money if permission is received in advance of the purchase from the Legislative-Citizen Commission on Minnesota Resources.

(i) For any acquisition of land or interest in land, a recipient of money appropriated under this section must give priority to high-quality natural resources or conservation lands that provide natural buffers to water resources.

(j) For new lands acquired with money appropriated under this section, a recipient must prepare an ecological restoration and management plan in compliance with paragraph (c), including sufficient funding for implementation unless the work plan addresses why a portion of the money is not necessary to achieve a high-quality restoration.

(k) To ensure public accountability for using public funds, a recipient of money appropriated under this section must, within 60 days of the transaction, provide to the Legislative-Citizen Commission on Minnesota Resources documentation of the selection process used to identify parcels acquired and provide documentation of all related transaction costs, including but not limited to appraisals, legal fees, recording fees, commissions, other similar costs, and donations. This information must be provided for all parties involved in the transaction. The recipient must also report to the Legislative-Citizen Commission on Minnesota Resources any difference between the acquisition amount paid to the seller and the state-certified or state-reviewed appraisal, if a state-certified or state-reviewed appraisal was conducted.

(l) A recipient of an appropriation from the trust fund under this section must acknowledge financial support from the environment and natural resources trust fund in project publications, signage, and other public communications and outreach related to work completed using the appropriation. Acknowledgment may occur, as appropriate, through use of the trust fund logo or inclusion of language attributing support from the trust fund. Each direct recipient of money appropriated in this section, as well as each recipient

of a grant awarded pursuant to this section, must satisfy all reporting and other requirements incumbent upon constitutionally dedicated funding recipients as provided in Minnesota Statutes, section 3.303, subdivision 10, and chapter 116P.

(m) A recipient of an appropriation from the trust fund under this section that is receiving funding to conduct children's services, as defined in Minnesota Statutes, section 299C.61, subdivision 7, must certify to the commission, as part of the required work plan, that it performs criminal background checks for background check crimes, as defined in Minnesota Statutes, section 299C.61, subdivision 2, on all employees, contractors, and volunteers that have or may have access to a child to whom the recipient provides children's services using the appropriation.

Subd. 14. Payment Conditions and Capital-Equipment Expenditures

(a) All agreements, grants, or contracts referred to in this section must be administered on a reimbursement basis unless otherwise provided in this section. Notwithstanding Minnesota Statutes, section 16A.41, expenditures made on or after July 1, 2021, or the date the work plan is approved, whichever is later, are eligible for reimbursement unless otherwise provided in this section. Periodic payments must be made upon receiving documentation that the deliverable items articulated in the approved work plan have been achieved, including partial achievements as evidenced by approved progress reports. Reasonable amounts may be advanced to projects to accommodate cash-flow needs or match federal money. The advances must be approved as part of the work plan. No expenditures for capital equipment are allowed unless expressly authorized in the project work plan.

(b) Single-source contracts as specified in the approved work plan are allowed.

Subd. 15. Purchasing Recycled and Recyclable Materials

A political subdivision, public or private corporation, or other entity that receives an appropriation under this section must use the appropriation in compliance with Minnesota Statutes, section 16C.0725, regarding purchasing recycled, repairable, and durable materials

and Minnesota Statutes, section 16C.073, regarding purchasing and using paper stock and printing.

Subd. 16. Energy Conservation and Sustainable Building Guidelines

A recipient to whom an appropriation is made under this section for a capital improvement project must ensure that the project complies with the applicable energy conservation and sustainable building guidelines and standards contained in law, including Minnesota Statutes, sections 16B.325, 216C.19, and 216C.20, and rules adopted under those sections. The recipient may use the energy planning, advocacy, and State Energy Office units of the Department of Commerce to obtain information and technical assistance on energy conservation and alternative-energy development relating to planning and constructing the capital improvement project.

Subd. 17. Accessibility

Structural and nonstructural facilities must meet the design standards in the Americans with Disabilities Act (ADA) accessibility guidelines.

Subd. 18. Carryforward; Extension

(a) Notwithstanding Minnesota Statutes, section 16A.28, or any other law to the contrary, the availability of any appropriation or grant of money from the environment and natural resources trust fund that would otherwise cancel, lapse, or expire on June 30, 2021, is extended to June 30, 2022, if the recipient or grantee does both of the following:

(1) by April 30, 2021, notifies the Legislative-Citizen Commission on Minnesota Resources in the manner specified by the commission that the recipient or grantee intends to avail itself of the extension available under this section; and

(2) modifies the applicable work plan where required by Minnesota Statutes, section 116P.05, subdivision 2, in accordance with the work plan amendment procedures adopted under that section.

(b) The commission must notify the commissioner of management and budget and the commissioner of

natural resources of any extension granted under this section.

Subd. 19. Transfers; Natural Resources Research Institute

(a) The following amounts, totaling \$840,000, are transferred to the Board of Regents of the University of Minnesota for academic and applied research through the MnDRIVE program at the Natural Resources Research Institute to develop and demonstrate technologies that enhance the long-term health and management of Minnesota's forest resources, extend the viability of incumbent forest-based industries, and accelerate emerging industry opportunities. Of this amount, \$500,000 is for extending the demonstrated forest management assessment tool to statewide application:

(1) the unencumbered amount, estimated to be \$250,000, in Laws 2017, chapter 96, section 2, subdivision 7, paragraph (e), Geotargeted Distributed Clean Energy Initiative;

(2) the unencumbered amount, estimated to be \$20,000, in Laws 2017, chapter 96, section 2, subdivision 8, paragraph (g), Minnesota Bee and Beneficial Species Habitat Restoration;

(3) the unencumbered amount, estimated to be \$350,000, in Laws 2018, chapter 214, article 4, section 2, subdivision 9, paragraph (e), Swedish Immigrant Regional Trail Segment within Interstate State Park; and

(4) the unencumbered amount, estimated to be \$220,000, in Laws 2019, First Special Session chapter 4, article 2, section 2, subdivision 5, paragraph (a), Expanding Camp Sunrise Environmental Program.

(b) The amounts transferred under this subdivision are available until June 30, 2023.

EFFECTIVE DATE. Subdivisions 18 and 19 are effective the day following final enactment.

Presented to the governor June 28, 2021

Signed by the governor June 29, 2021, 1:42 p.m.

FY2023 - MN Laws 2022, Chapter 94, Section 2

**M.L. 2022 Environment and Natural Resources Trust Fund (ENRTF)
Appropriations by Subdivision**

Process for M.L. 2022

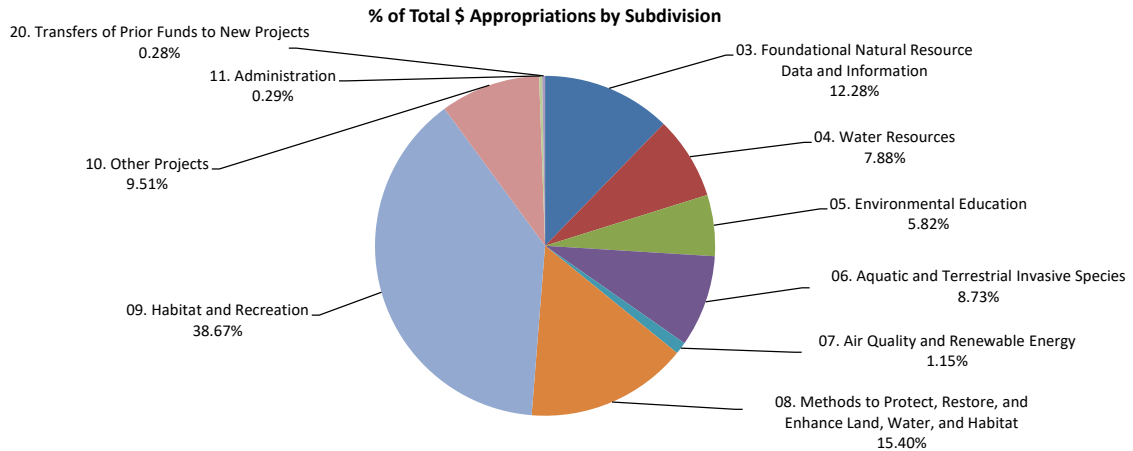
For the FY 2022 and FY 2023 biennium (July 1, 2021 - June 30, 2023), approximately \$70 million was available each year for funding from the Environment and Natural Resources Trust Fund (ENRTF). For funding beginning July 1, 2022 (FY 2023), the Legislative-Citizen Commission on Minnesota Resources (LCCMR) received 220 proposals requesting a total of approximately \$178 million in response to its 2022 Request for Proposals (RFP). Thirty-one proposals withdrew after the passage of the 2020 and 2021 ENRTF appropriations, resulting in a revised total of 189 proposals requesting a total of approximately \$142 million. The LCCMR reviewed and considered the proposals through a competitive, multi-stage evaluation but did not make an official recommendation to the Minnesota Legislature. The House and Senate introduced and heard bills that included projects that went through the LCCMR process. The House bill contained 74 projects, and the Senate bill contained 96 projects.

On May 22, 2022, the Legislature approved 80 projects for funding from the Environment and Natural Resources Trust Fund. Twelve of the approved projects did not go through the LCCMR proposal review process, and the scope of two projects that did go through the process was modified by the Legislature. Twenty-five LCCMR-reviewed projects that were originally included in the House or Senate version of the bill were not included in the final bill. On June 3, 2022, the 80 appropriations were signed into law by the Governor as M.L. 2022, Chapter 94, with \$70,881,000 FY23 and \$2,463,000 recaptured from prior fiscal years, for \$73,344,000 in total appropriations.

January 11, 2021	RFP Issued
April 2, 2021	RFP Proposal Deadline
July 6, 2021	Selection of Proposals for Further Consideration and Presentations
July 13, 15, 20 & 27-28, 2021	Proposal Presentations
August 26, September 23 & December 15, 2021	LCCMR Allocation Discussions
September 2021 - June 2022	Research Projects Undergo Peer Review
January 5, 2022	2022 Minnesota Legislative Session Begins
June 3, 2022	Appropriations Signed into Law by Governor

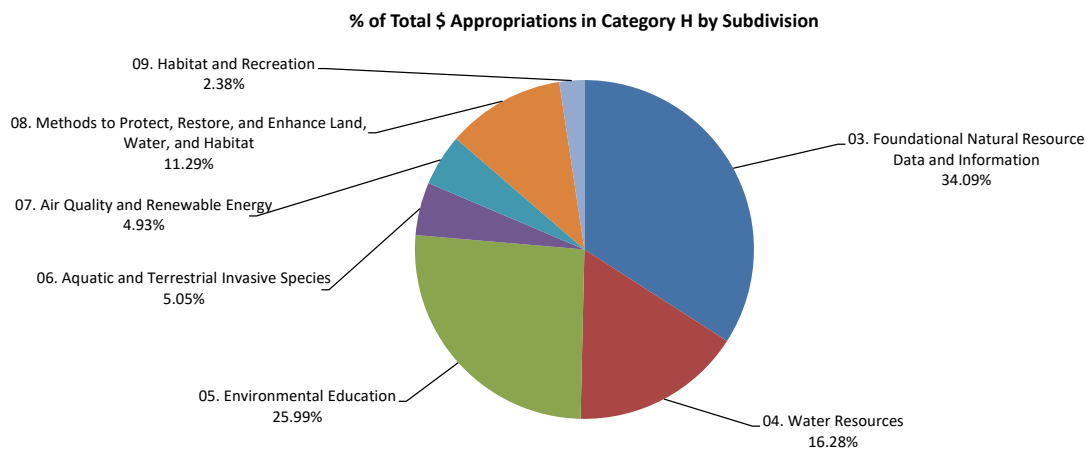
Summary of Appropriations by Subdivision

Subdivision	\$ Appropriations	\$ Percent	# Appropriations	# Percent
03. Foundational Natural Resource Data and Information	\$9,004,000	12.28%	15	18.75%
04. Water Resources	\$5,783,000	7.88%	14	17.50%
05. Environmental Education	\$4,269,000	5.82%	9	11.25%
06. Aquatic and Terrestrial Invasive Species	\$6,404,000	8.73%	2	2.50%
07. Air Quality and Renewable Energy	\$843,000	1.15%	2	2.50%
08. Methods to Protect, Restore, and Enhance Land, Water, and Habitat	\$11,294,000	15.40%	11	13.75%
09. Habitat and Recreation	\$28,362,000	38.67%	14	17.50%
10. Other Projects	\$6,973,000	9.51%	11	13.75%
11. Administration	\$210,000	0.29%	1	1.25%
20. Transfers of Prior Funds to New Projects	\$202,000	0.28%	1	1.25%
Total	\$73,344,000	100.00%	80	100.00%



Summary of Category H Appropriations by Subdivision

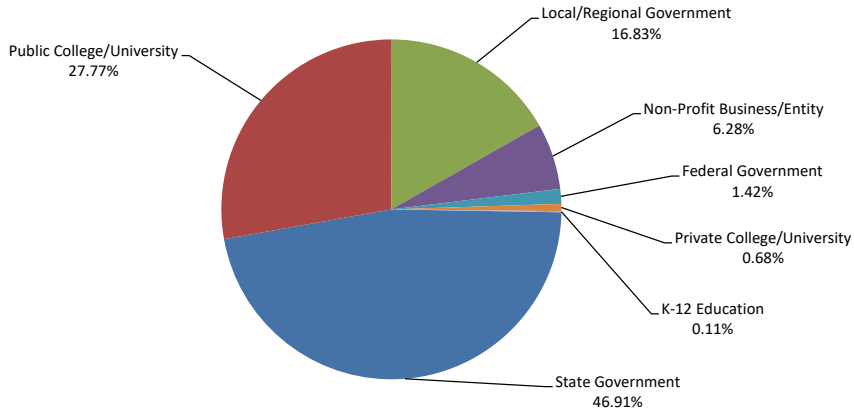
Subdivision	\$ Appropriations	\$ Percent	# Appropriations	# Percent
03. Foundational Natural Resource Data and Information	\$1,175,000	34.09%	6	33.33%
04. Water Resources	\$561,000	16.28%	3	16.67%
05. Environmental Education	\$896,000	25.99%	4	22.22%
06. Aquatic and Terrestrial Invasive Species	\$174,000	5.05%	1	5.56%
07. Air Quality and Renewable Energy	\$170,000	4.93%	1	5.56%
08. Methods to Protect, Restore, and Enhance Land, Water, and Habitat	\$389,000	11.29%	2	11.11%
09. Habitat and Recreation	\$82,000	2.38%	1	5.56%
Total	\$3,447,000	100.00%	18	100.00%



Summary of Appropriations by Proposer Affiliation

Affiliation Type	\$ Appropriations	\$ Percent	# Appropriations	# Percent
State Government	\$34,406,000	46.91%	25	31.25%
Public College/University	\$20,368,000	27.77%	29	36.25%
Local/Regional Government	\$12,341,000	16.83%	15	18.75%
Non-Profit Business/Entity	\$4,609,000	6.28%	7	8.75%
Federal Government	\$1,038,000	1.42%	2	2.50%
Private College/University	\$500,000	0.68%	1	1.25%
K-12 Education	\$82,000	0.11%	1	1.25%
Total	\$73,344,000	100.00%	80	100.00%

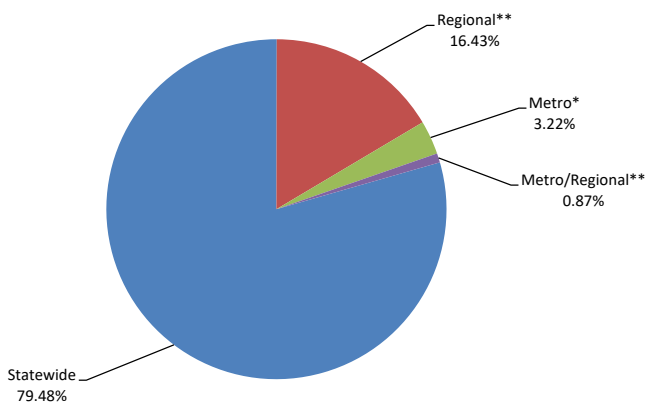
% of Total \$ Appropriations by Proposer Affiliation



Summary of Appropriations by Area of Impact

Areas of Impact	\$ Appropriations	\$ Percent	# Appropriations	# Percent
Statewide	\$58,291,000	79.48%	58	72.50%
Regional**	\$12,051,000	16.43%	16	20.00%
Metro*	\$2,362,000	3.22%	4	5.00%
Metro/Regional**	\$640,000	0.87%	2	2.50%
Total	\$73,344,000	100.00%	80	100.00%

% of Total \$ Appropriations by Area of Impact



* "Metro" region includes the 11 counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright.

** "Regional" means area of impact is less than "Statewide" but includes one or more regions of the state ("Northwest", "Northeast", "Central", "Southwest", or "Southeast") other than the 11-county "Metro" region.

**M.L. 2022 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for RFP 2022/FY 2023**

On May 22, 2022, the Legislature approved 80 projects for funding from the Environment and Natural Resources Trust Fund. Twelve of the approved projects did not go through the LCCMR proposal review process, and the scope of two projects that did go through the process was modified by the Legislature. Twenty-five LCCMR-reviewed projects that were originally included in the House or Senate version of the bill were not included in the final bill. On June 3, 2022, the 80 appropriations were signed into law by the Governor as M.L. 2022, Chapter 94, with \$70,881,000 FY23 and \$2,463,000 recaptured from prior fiscal years, for \$73,344,000 in total appropriations.

Topic Area	Multiple FY's Reallocated \$	FY2023 Trust Fund \$	Total LCCMR \$ Appropriated	Percentage of Total Appropriations
Subd. 03 Foundational Natural Resource Data and Information 15 Appropriations	\$0	\$9,004,000	\$9,004,000	12.28%
Subd. 04 Water Resources 14 Appropriations	\$0	\$5,783,000	\$5,783,000	7.88%
Subd. 05 Environmental Education 9 Appropriations	\$0	\$4,269,000	\$4,269,000	5.82%
Subd. 06 Aquatic and Terrestrial Invasive Species 2 Appropriations	\$0	\$6,404,000	\$6,404,000	8.73%
Subd. 07 Air Quality and Renewable Energy 2 Appropriations	\$0	\$843,000	\$843,000	1.15%
Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat 11 Appropriations	\$0	\$11,294,000	\$11,294,000	15.40%
Subd. 09 Habitat and Recreation 14 Appropriations	\$2,183,000	\$26,179,000	\$28,362,000	38.67%
Subd. 10 Other Projects 11 Appropriations	\$0	\$6,973,000	\$6,973,000	9.51%
Subd. 11 Administrative 1 Appropriation	\$78,000	\$132,000	\$210,000	0.29%
Subd. 20 Transfers 1 Appropriation (amounts are estimate)	\$202,000	\$0	\$202,000	0.28%
Total Appropriations	\$2,463,000	\$70,881,000	\$73,344,000	100.00%

Fund Source	\$ Amount
FY 2023 - Environment and Natural Resources Trust Fund (ENRTF)	\$70,881,000
ENRTF Dollars Reallocated from 2021 Appropriations (FY20)- estimate	\$78,000
ENRTF Dollars Reallocated from 2018 Appropriations (FY19)- estimate	\$550,000
ENRTF Dollars Reallocated from 2017 Appropriations (FY18)- estimate	\$1,835,000
Total \$	\$73,344,000

**M.L. 2022 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for RFP 2022/FY 2023**

Bill Subd.	Original Proposal ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2023	TOTAL ENRTF \$ Appropriated
Subd. 03 Foundational Natural Resource Data and Information (15 Appropriations - Subtotal = \$9,004,000)							
03a	2022-043	Improving Golden-Winged Warbler Conservation and Habitat Restoration	U of MN, Duluth - NRRI	Alexis Grinde	\$0	\$197,000	\$197,000
03b	2022-048	Enhancing Natural Resource Conservation Through Species Distribution Modeling	MN DNR, Ecological and Water Resources Division	Holly Bernardo	\$0	\$200,000	\$200,000
03c	2022-076	Modernizing Minnesota's Digital Lake Inventory	MN DNR, Ecological and Water Resources Division	Steve Kloiber	\$0	\$787,000	\$787,000
03d	2022-091	How Do Prescribed Fires Affect Native Prairie Bees?	Negaunee Institute for Plant Conservation Science and Action at the Chicago Horticultural Society	Stuart Wagenius	\$0	\$500,000	\$500,000
03e	2022-109	Status of Minnesota Blueberries and Related Berry Species	U of MN, Duluth	Briana Gross	\$0	\$191,000	\$191,000
03f	2022-122	Distribution and Movements of Fishers in Southern Minnesota	U of MN, Duluth - NRRI	Michael Joyce	\$0	\$340,000	\$340,000
03g	2022-149	Offal Wildlife Watching: How Do Hunters' Provisions Impact Scavengers?	U of MN, College of Food, Agricultural and Natural Resource Sciences	Joseph Bump	\$0	\$473,000	\$473,000
03h	2022-163	Land-Use and Climate Impacts on Minnesota's Whitewater River	U of MN, St. Anthony Falls Laboratory	Andrew Wickert	\$0	\$199,000	\$199,000
03i	2022-185	Protecting Minnesota's Spruce-Fir Forests from Tree-Killing Budworm	U of MN, College of Food, Agricultural and Natural Resource Sciences	Brian Aukema	\$0	\$189,000	\$189,000
03j	2022-193	Restoration of Eastern Hemlock, Minnesota's Endangered Tree Species	U of MN, College of Food, Agricultural and Natural Resource Sciences	Andrew David	\$0	\$199,000	\$199,000
03k	2022-217	Establishing a Center for Prion Research and Outreach	U of MN, College of Veterinary Medicine	Peter Larsen	\$0	\$3,877,000	\$3,877,000
03l	2022-266	Sweetening the Crop: Perennial Flax for Ecosystem Benefits	U of MN, College of Food, Agricultural and Natural Resource Sciences	Neil Anderson	\$0	\$490,000	\$490,000
03m	2022-275	Beavers, Trees, and Climate - Increasing Floodplain Forest Resilience	National Park Service, Mississippi National River and Recreation Area	Nancy Duncan	\$0	\$430,000	\$430,000
03n	---	Chronic Wasting Disease Prion Soil Research	U of MN	OPEN	\$0	\$732,000	\$732,000

**M.L. 2022 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for RFP 2022/FY 2023**

Bill Subd.	Original Proposal ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2023	TOTAL ENRTF \$ Appropriated
03o	2022-081	Strategic Framework to Guide Local Water Storage Implementation	Board of Water and Soil Resources	Henry Van Offelen	\$0	\$200,000	\$200,000
Subd. 03 Foundational Natural Resource Data and Information Subtotal =					\$0	\$9,004,000	\$9,004,000
Subd. 04 Water Resources (14 Appropriations - Subtotal = \$5,783,000)							
04a	2022-049	Methods to Destroy PFAS in Landfill Leachates	U of MN, College of Food, Agricultural and Natural Resource Sciences	Roger Ruan	\$0	\$200,000	\$200,000
04b	2022-087	High Temperature Anaerobic Digestion of Sewage Sludge	U of MN, College of Science and Engineering	Timothy LaPara	\$0	\$208,000	\$208,000
04c	2022-099	Mitigating Cyanobacterial Blooms and Toxins Using Clay-Algae Flocculation	U of MN, St. Anthony Falls Laboratory	Judy Yang	\$0	\$326,000	\$326,000
04d	2022-103	Changing Winters and Game Fish in Minnesota Lakes	U of MN, Duluth - Large Lakes Observatory	Ted Ozersky	\$0	\$238,000	\$238,000
04e	2022-116	Rainy River Drivers of Lake of the Woods Algal Blooms	US Geological Survey, Upper Midwest Water Science Center	Anna Baker	\$0	\$608,000	\$608,000
04f	2022-152	Water and Climate Information to Enhance Community Resilience	U of MN, College of Food, Agricultural and Natural Resource Sciences	Tracy Twine	\$0	\$564,000	\$564,000
04g	2022-155	Catch and Reveal: Discovering Unknown Fish Contamination Threats	U of MN, Duluth - NRI	Bridget Ulrich	\$0	\$246,000	\$246,000
04h	2022-166	Increased Intense Rain and Flooding in Minnesota's Watersheds	Science Museum of Minnesota, St. Croix Watershed Research Station	Jason Ulrich	\$0	\$192,000	\$192,000
04i	2022-224	Is the Tire Chemical 6PPDq Killing Minnesota's Fish?	U of MN, College of Food, Agricultural and Natural Resource Sciences	Nicholas Phelps	\$0	\$437,000	\$437,000
04j	2022-251	Mitigation Strategies for Agroplastic PFAS and Microplastic Contamination	U of MN, WCROC	Joel Tallaksen	\$0	\$169,000	\$169,000
04k	2022-265	Innovative Technology for PFAS Destruction in Drinking Water	U of MN, Southern Research and Outreach Center	Shaobo Deng	\$0	\$445,000	\$445,000
04l	2022-272	Salt Threatens Minnesota Water Quality and Fisheries	Science Museum of Minnesota, St. Croix Watershed Research Station	Mark Edlund	\$0	\$1,228,000	\$1,228,000
04m	2022-286	PFAS Contaminant Mitigation Using Hybrid Engineered Wetlands	St. Louis County	Mark St. Lawrence	\$0	\$446,000	\$446,000
04n	2022-046	Scaling a Market-Driven Water-Quality Solution for Row-Crop Farming	U of MN, College of Food, Agricultural and Natural Resource Sciences	Nicholas Jordan	\$0	\$476,000	\$476,000
Subd. 04 Water Resources Subtotal =					\$0	\$5,783,000	\$5,783,000
Subd. 05 Environmental Education (9 Appropriations - Subtotal \$4,269,000)							

**M.L. 2022 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for RFP 2022/FY 2023**

Bill Subd.	Original Proposal ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2023	TOTAL ENRTF \$ Appropriated
05a	2022-026	Teacher Field School: Stewardship through Nature-Based Education	Hamline University	Patty Born	\$0	\$500,000	\$500,000
05b	2022-029	Increasing K-12 Student Learning to Develop Environmental Awareness, Appreciation, and Interest	Osprey Wilds Environmental Learning Center	Bryan Wood	\$0	\$1,602,000	\$1,602,000
05c	2022-066	Expanding Access to Wildlife Learning Bird by Bird	MN DNR, Ecological and Water Resources Division	Alison Cariveau	\$0	\$276,000	\$276,000
05d	2022-107	Engaging a Diverse Public in Environmental Stewardship	Great River Greening	Amy Kilgore	\$0	\$300,000	\$300,000
05e	2022-162	Bugs Below Zero: Engaging Citizens in Winter Research	U of MN, College of Food, Agricultural and Natural Resource Sciences	Rebecca Swenson	\$0	\$198,000	\$198,000
05f	2022-169	ESTEP: Earth Science Teacher Education Project	Minnesota Science Teachers Association	Lee Schmitt	\$0	\$495,000	\$495,000
05g	2022-236	YES! Students Take Action to Complete Eco Projects	Prairie Woods Environmental Learning Center	Joseph Dunlavy	\$0	\$199,000	\$199,000
05h	2022-250	Increasing Diversity in Environmental Careers	MN DNR, Operational Services Division (OSD)	Mimi Daniel	\$0	\$500,000	\$500,000
05i	2022-279	Diversity and Access to Wildlife-Related Opportunities	U of MN, College of Food, Agricultural and Natural Resource Sciences	Alexandrea Safiq	\$0	\$199,000	\$199,000
Subd. 05 Environmental Education Subtotal =					\$0	\$4,269,000	\$4,269,000
Subd. 06 Aquatic and Terrestrial Invasive Species (2 Appropriations - Subtotal = \$6,404,000)							
06a	2022-067	Minnesota Invasive Terrestrial Plants and Pests Center	U of MN, MITPPC	Heather Koop	\$0	\$6,230,000	\$6,230,000
06b	2022-089	Purple Loosestrife Biocontrol Citizen Science Program	St. Croix River Association	Katie Sickmann	\$0	\$174,000	\$174,000
Subd. 06 Aquatic and Terrestrial Invasive Species Subtotal =					\$0	\$6,404,000	\$6,404,000
Subd. 07 Air Quality and Renewable Energy (2 Appropriations - Subtotal = \$843,000)							
07a	2022-180	Green Solar Cells from a Minnesota Natural Resource	U of MN, College of Science and Engineering	Chris Leighton	\$0	\$673,000	\$673,000
07b	2022-291	Morris GHG Emissions Inventory and Mitigation Strategies	City of Morris	Blaine Hill	\$0	\$170,000	\$170,000
Subd. 07 Air Quality and Renewable Energy Subtotal =					\$0	\$843,000	\$843,000
Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat (11 Appropriations - Subtotal = \$11,294,000)							
08a	2022-006	Minnesota's Volunteer Rare Plant Conservation Corps	U of MN, Landscape Arboretum	David Remucal	\$0	\$859,000	\$859,000
08b	2022-034	Conservation Corps Veterans Service Corps Program	Conservation Corps Minnesota	Brian Miller	\$0	\$1,339,000	\$1,339,000

**M.L. 2022 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for RFP 2022/FY 2023**

Bill Subd.	Original Proposal ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2023	TOTAL ENRTF \$ Appropriated
08c	2022-061	Creating Seed Sources of Early-Blooming Plants for Pollinators	MN DNR, Ecological and Water Resources Division	Chrisina Locke	\$0	\$200,000	\$200,000
08d	2022-065	Hastings Lake Rebecca Park Area	City of Hastings, Parks & Recreation	Chris Jenkins	\$0	\$1,000,000	\$1,000,000
08e	2022-167	Pollinator Plantings and the Redistribution of Soil Toxins	U of MN, College of Biological Sciences	Emilie Snell-Rood	\$0	\$610,000	\$610,000
08f	2022-188	PFAS Fungal-Wood Chip Filtering System	U of MN, College of Food, Agricultural and Natural Resource Sciences	Jiwei Zhang	\$0	\$189,000	\$189,000
08g	2022-214	Phytoremediation for Extracting Deicing Salt	U of MN, College of Food, Agricultural and Natural Resource Sciences	Bo Hu	\$0	\$451,000	\$451,000
08h	2022-221	Mustinka River Fish and Wildlife Habitat Corridor Rehabilitation	Bois de Sioux Watershed District	Jamie Beyer	\$0	\$2,692,000	\$2,692,000
08i	2022-244	Bohemian Flats Savanna Restoration	Minneapolis Parks and Recreation Board	Adam Arvidson	\$0	\$286,000	\$286,000
08j	2022-260	Watershed and Forest Restoration: What a Match!	Board of Water and Soil Resources	Lindberg Ekola	\$0	\$3,318,000	\$3,318,000
08k	2022-142	River Habitat Restoration and Recreation in Melrose	City of Melrose	Colleen Winter	\$0	\$350,000	\$350,000
Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat Subtotal =					\$0	\$11,294,000	\$11,294,000
Subd. 09 Habitat and Recreation (14 Appropriations - Subtotal = \$28,362,000)							
09a	2022-005	Mesabi Trail: Wahlsten Road (CR 26) to Tower	St. Louis & Lake Counties Regional Railroad Authority	Bill Dahl	\$0	\$1,307,000	\$1,307,000
09b	2022-041	Environmental Learning Classroom with Trails	Independent School District #712, Mountain Iron Buhl Public Schools	Reggie Engebritson	\$0	\$82,000	\$82,000
09c	2022-057	Local Parks, Trails, and Natural Areas Grant Programs	MN DNR, Grants Unit	Audrey Mularie	\$0	\$3,560,000	\$3,560,000
09d	2022-088	St. Louis River Re-Connect	City of Duluth	Cliff Knettel	\$0	\$500,000	\$500,000
09e	2022-101	Native Prairie Stewardship and Prairie Bank Easement Acquisition	MN DNR, Ecological and Water Resources Division	Judy Schulte	\$0	\$1,353,000	\$1,353,000
09f	2022-111	Minnesota State Parks and State Trails Maintenance and Development	MN DNR, State Parks and Trails Division	Shelby Kok	\$2,183,000	\$1,600,000	\$3,783,000
09g	2022-135	Minnesota State Trails Development	MN DNR, State Parks and Trails Division	Kent Skaar	\$0	\$7,387,000	\$7,387,000

**M.L. 2022 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for RFP 2022/FY 2023**

Bill Subd.	Original Proposal ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2023	TOTAL ENRTF \$ Appropriated
09h	2022-158	SNA Habitat Restoration and Public Engagement	MN DNR, Ecological and Water Resources Division	Molly Roske	\$0	\$5,000,000	\$5,000,000
09i	2022-008	The Missing Link: Gull Lake Trail, Fairview Township	Fairview Township	Marla Yoho	\$0	\$1,394,000	\$1,394,000
09j	2022-127	Silver Bay Multimodal Trailhead Project	City of Silver Bay	Lana Fralich	\$0	\$1,000,000	\$1,000,000
09k	2022-140	Brookston Campground, Boat Launch, and Outdoor Recreational Facility	City of Brookston	Kaycee Melin	\$0	\$453,000	\$453,000
09l	2022-143	Silver Lake Trail Connection	City of Virginia	Britt See-Benes	\$0	\$727,000	\$727,000
09m	2022-150	Floodwood Campground Improvement Project	City of Floodwood	Corinne Suonvieri	\$0	\$816,000	\$816,000
09n	2022-165	Ranier Safe Harbor/Transient Dock - Phase 2	City of Ranier	Sherril Gautreaux	\$0	\$1,000,000	\$1,000,000
Subd. 09 Habitat and Recreation Subtotal =					\$2,183,000	\$26,179,000	\$28,362,000
Subd. 10 Other Projects (11 Appropriations - Subtotal = \$6,973,000)							
10a	---	Aggregate Resource Mapping	MN DNR	OPEN		\$500,000	\$500,000
10b	---	Leaded Gasoline Contamination Analysis	City of Paynesville	OPEN		\$200,000	\$200,000
10c	---	Living Snow Fence Program	Minnesota Department of Transportation	OPEN		\$200,000	\$200,000
10d	---	Forest Data Inventory	MN DNR	OPEN		\$500,000	\$500,000
10e	---	Conservation Reserve Program State Incentives	Board of Water and Soil Resources	OPEN		\$750,000	\$750,000
10f	---	Groundwater Storage and Recovery Datatbase	MN DNR	OPEN		\$400,000	\$400,000
10g	---	Rural and Farmstead Ring Levees	MN DNR	OPEN		\$360,000	\$360,000
10h	---	Replacing Failing Septic Systems to Protect Groundwater	Minnesota Pollution Control Agency	OPEN		\$2,000,000	\$2,000,000
10i	---	Forever Green	U of MN	OPEN		\$763,000	\$763,000
10j	---	Pig's Eye Landfill Task Force	Minnesota Pollution Control Agency	OPEN		\$800,000	\$800,000
10k	---	Developing Markets for Continuous Living Cover Crops	Minnesota Department of Agriculture	OPEN		\$500,000	\$500,000
Subd. 10 Other Projects Subtotal =					\$0	\$6,973,000	\$6,973,000
Subd. 11 Administrative (1 Appropriation - Subtotal = \$210,000)							
11	2022-121	Contract Agreement Reimbursement	MN DNR, Grants Unit	Katherine Sherman-Hoehn	\$78,000	\$132,000	\$210,000
Subd. 11 Administrative Subtotal =					\$78,000	\$132,000	\$210,000
Subd. 20 Transfers* (1 Appropriation - Subtotal = \$202,000)							
20a	2022-111	SEE SUBD. 09f- Minnesota State Parks and State Trails Maintenance and Development (\$2,183,000)	MN DNR, State Parks and Trails Division	Kent Skaar	---	---	---
20b	---	Emerging Issues Account	Legislative-Citizen Commission on Minnesota Resources	Becca Nash	\$202,000	\$0	\$202,000

**M.L. 2022 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Appropriations for RFP 2022/FY 2023**

Bill Subd.	Original Proposal ENRTF ID	Title	Organization	Project Manager	ENRTF \$ Multiple FYs	ENRTF \$ FY2023	TOTAL ENRTF \$ Appropriated
20c	2022-121	SEE SUBD. 11 - 2022 Contract Agreement Reimbursement (\$78,000)	MN DNR, Grants Unit	Katherine Sherman-Hoehn	---	---	---
Subd. 20 Transfers Subtotal =					\$202,000	\$0	\$202,000
Total \$ =					\$2,463,000	\$70,881,000	\$73,344,000

*Estimate amount, pending final close-out of completing projects being transferred

CHAPTER 94--H.F.No. 3765

An act relating to natural resources; appropriating money from environment and natural resources trust fund; providing for extensions and transfers; modifying requirements for expending trust fund money; requiring a report; amending Minnesota Statutes 2020, section 116P.08, subdivision 2.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. **APPROPRIATIONS.**

The sums shown in the columns marked "Appropriations" are appropriated to the agencies and for the purposes specified in this act. The appropriations are from the environment and natural resources trust fund and are available for the fiscal years indicated for each purpose. The figures "2022" and "2023" used in this act mean that the appropriations listed under them are available for the fiscal year ending June 30, 2022, or June 30, 2023, respectively. "The first year" is fiscal year 2022. "The second year" is fiscal year 2023. "The biennium" is fiscal years 2022 and 2023. Any unencumbered balance remaining in the first year does not cancel and is available for the second year or until the end of the appropriation. These are onetime appropriations.

<u>APPROPRIATIONS</u>	
<u>Available for the Year</u>	
<u>Ending June 30</u>	
<u>2022</u>	<u>2023</u>

Sec. 2. **MINNESOTA RESOURCES**

<u>Subdivision 1. Total Appropriation</u>	<u>\$</u>	<u>-0-</u>	<u>\$</u>	<u>70,881,000</u>
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This appropriation is from the environment and natural resources trust fund. The amounts that may be spent for each purpose are specified in the following subdivisions.

Subd. 2. **Definition**

"Trust fund" means the Minnesota environment and natural resources trust fund established under the Minnesota Constitution, article XI, section 14.

Subd. 3. **Foundational Natural Resource Data and Information**

	<u>-0-</u>	<u>\$</u>	<u>9,004,000</u>
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(a) Improving Golden-Winged Warbler Conservation and Habitat Restoration

\$197,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to develop restoration and habitat management guidelines for protecting the imperiled golden-winged warbler by assessing habitat use and behavior of this species.

(b) Enhancing Natural Resource Conservation Through Species Distribution Modeling

\$200,000 the second year is from the trust fund to the commissioner of natural resources to create distribution models for rare species in Minnesota to provide new tools for natural areas conservation.

(c) Modernizing Minnesota's Digital Lake Inventory

\$787,000 the second year is from the trust fund to the commissioner of natural resources to conduct a comprehensive update of Minnesota's lake and pond GIS data to enhance lake conservation planning by state and local partners while also creating efficiencies for ongoing data maintenance.

(d) How Do Prescribed Fires Affect Native Prairie Bees?

\$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Negaunee Institute for Plant Conservation Science and Action at the Chicago Horticultural Society to investigate how prescribed fire in Minnesota's tallgrass prairies affects the nesting habitat, food resources, and diversity of ground-nesting bees.

(e) Status of Minnesota Blueberries and Related Berry Species

\$191,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota, Duluth, to assess how land management practices impact the genetic health and reproduction of several native edible blueberry and related berry species of Minnesota. This appropriation is available until June 30, 2026, by which time the project must be completed and final products delivered.

(f) Distribution and Movements of Fishers in Southern Minnesota

\$340,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to determine the distribution, status, and habitat use of fishers in southern Minnesota to inform fisher management.

(g) Offal Wildlife Watching: How Do Hunters' Provisions Impact Scavengers?

\$473,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to recruit hunters statewide and use remote cameras at field-dressed deer gut piles to study the impacts of these offal resources on scavengers and other wildlife.

(h) Land-Use and Climate Impacts on Minnesota's Whitewater River

\$199,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the St. Anthony Falls Laboratory to augment, digitize, and disseminate unique and historic topographical survey data showing changes in the Whitewater River valley to inform future land and water management.

(i) Protecting Minnesota's Spruce-Fir Forests from Tree-Killing Budworm

\$189,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to evaluate conditions contributing to Minnesota's uniquely high population of the native and lethal spruce budworm to provide better management options for protecting the state's spruce-balsam fir forests.

(j) Restoration of Eastern Hemlock, Minnesota's Endangered Tree Species

\$199,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to develop guidelines for restoring eastern hemlock, Minnesota's only endangered tree species, by testing methods and seed sources at different sites across northern Minnesota.

(k) Establishing a Center for Prion Research and Outreach

\$3,877,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to form a multidisciplinary center to perform coordinated research on the detection, prevention, and treatment of chronic wasting and other prion diseases threatening wildlife across Minnesota. Money appropriated in this paragraph may also be spent on a strategic plan, capital equipment, and staff as approved in the work plan required under Minnesota Statutes, section 116P.05. Money appropriated in this paragraph may not be spent on activities unless they are directly related to and necessary for the purposes of this paragraph. Money appropriated in this paragraph must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for the purposes of this paragraph. This appropriation is subject to Minnesota Statutes, section 116P.10. This is a onetime appropriation and is available until June 30, 2026.

(l) Sweetening the Crop: Perennial Flax for Ecosystem Benefits

\$490,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to produce, select, and evaluate how perennial flax provides pollinator and other ecosystem services while enhancing yield for oilseed, fiber, and honey production.

(m) Beavers, Trees, and Climate - Increasing Floodplain Forest Resilience

\$430,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the National Park Service, Mississippi National River and Recreation Area, to identify solutions for saving floodplain wildlife habitat from beaver herbivory, changes in climate, and emerald ash borer.

(n) Chronic Wasting Disease Prion Soil Research

\$732,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to study chronic wasting disease prions in soils, including the assessment of sites where carcasses with chronic wasting disease have been disposed.

(o) Strategic Framework to Guide Local Water Storage Implementation

\$200,000 the second year is from the trust fund to the Board of Water and Soil Resources to create a framework for prioritizing water storage projects throughout the state. The framework will use existing data and local stakeholder input, be scalable, and emphasize projects that provide multiple benefits, including for water quality, flood control, and habitat.

Subd. 4. Water Resources

-0-

5,783,000

(a) Methods to Destroy PFAS in Landfill Leachates

\$200,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to develop and examine methods for destruction of per- and polyfluoroalkyl substances (PFAS) in landfill leachate. This appropriation is subject to Minnesota Statutes, section 116P.10.

(b) High Temperature Anaerobic Digestion of Sewage Sludge

\$208,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to demonstrate that high temperature anaerobic digestion is effective at treating sewage sludge and preventing disease-causing microorganisms and antibiotic resistance genes from being released into the environment.

(c) Mitigating Cyanobacterial Blooms and Toxins Using Clay-Algae Flocculation

\$326,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for St. Anthony Falls Laboratory to develop and test a clay-algae flocculation method to mitigate cyanobacterial blooms that can contaminate drinking water and cause mass fish mortality. This appropriation is subject to Minnesota Statutes, section 116P.10.

(d) Changing Winters and Game Fish in Minnesota Lakes

\$238,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for

the Large Lakes Observatory in Duluth to determine how changing winter conditions such as ice cover, snowfall patterns, and water quality affect Minnesota's game fish populations.

(e) Rainy River Drivers of Lake of the Woods Algal Blooms

\$608,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the United States Geological Survey, Upper Midwest Water Science Center, to guide the reduction of phosphorus inputs to Lake of the Woods by examining sources, mobility, and storage of sediment-bound phosphorus in the Rainy River. This appropriation is available until June 30, 2026, by which time the project must be completed and final products delivered.

(f) Water and Climate Information to Enhance Community Resilience

\$564,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to provide information on potential future water resources to communities and individuals to guide adaptation planning.

(g) Catch and Reveal: Discovering Unknown Fish Contamination Threats

\$246,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Natural Resources Research Institute in Duluth to identify contaminants present in Minnesota water bodies using passive sampling and discovery-based chemical analysis and rank the contaminants' potential threat to Minnesota's fisheries. This appropriation is available until June 30, 2026, by which time the project must be completed and final products delivered.

(h) Increased Intense Rain and Flooding in Minnesota's Watersheds

\$192,000 the second year is from the trust fund to the Science Museum of Minnesota for the St. Croix Watershed Research Station to partner with local communities to determine the causes of increased

flooding and the most cost-effective solutions for reducing flood risk in the Cottonwood River watershed and other agricultural watersheds in southern Minnesota.

(i) Is the Tire Chemical 6PPDq Killing Minnesota's Fish?

\$437,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to optimize detection methods, determine environmental occurrence, and evaluate risk to Minnesota's fish populations of the toxic tire-derived chemical 6PPDq.

(j) Mitigation Strategies for Agroplastic PFAS and Microplastic Contamination

\$169,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the West Central Research and Outreach Center, Morris, to study plastic use in the agricultural supply chain and to research and communicate strategies to reduce impacts of this plastic use, including water and land contamination from microplastics, PFAS, and related compounds.

(k) Innovative Technology for PFAS Destruction in Drinking Water

\$445,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Southern Research and Outreach Center to develop and demonstrate a treatment process based on continuous liquid-phase plasma discharge technology to destroy per- and polyfluoroalkyl substances (PFAS) in drinking water. This appropriation is subject to Minnesota Statutes, section 116P.10.

(l) Salt Threatens Minnesota Water Quality and Fisheries

\$1,228,000 the second year is from the trust fund to the Science Museum of Minnesota for the St. Croix Watershed Research Station to determine chloride tipping points that lead to water-quality and food-web degradations, measure how and when lakes are salinized, identify lake and food-web resilience to chloride, and test impacts of deicing alternatives.

(m) PFAS Contaminant Mitigation Using Hybrid Engineered Wetlands

\$446,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with St. Louis County to design, implement, and evaluate an innovative method for protecting water resources through mitigation of per- and polyfluoroalkyl substances (PFAS) from landfill leachate using engineered wetland treatment systems.

(n) Scaling a Market-Driven Water-Quality Solution for Row-Crop Farming

\$476,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to work with farmers to accelerate adoption of grain-camelina rotations in targeted watersheds as a scalable and market-driven way to enhance stewardship of soil, water, and wildlife.

Subd. 5. **Environmental Education**

-0-

4,269,000

(a) Teacher Field School: Stewardship through Nature-Based Education

\$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Hamline University to create an immersive, research-backed field school for teachers to use nature-based education to benefit student well-being and academic outcomes while increasing stewardship habits.

(b) Increasing K-12 Student Learning to Develop Environmental Awareness, Appreciation, and Interest

\$1,602,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Osprey Wilds Environmental Learning Center to partner with Minnesota's five other accredited residential environmental learning centers to provide needs-based scholarships to at least 25,000 K-12 students statewide for immersive multiday environmental learning experiences.

(c) Expanding Access to Wildlife Learning Bird by Bird

\$276,000 the second year is from the trust fund to the commissioner of natural resources to engage young people from diverse communities in wildlife conservation through bird-watching in schools, outdoor leadership training, and participating in neighborhood bird walks.

(d) Engaging a Diverse Public in Environmental Stewardship

\$300,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Great River Greening to increase participation in natural resources restoration efforts through volunteer, internship, and youth engagement activities that target diverse audiences more accurately reflecting local demographic and socioeconomic conditions in Minnesota.

(e) Bugs Below Zero: Engaging Citizens in Winter Research

\$198,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to raise awareness about the winter life of bugs, inspire learning about stream food webs, and engage citizen scientists in research and environmental stewardship.

(f) ESTEP: Earth Science Teacher Education Project

\$495,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Minnesota Science Teachers Association to provide professional development for Minnesota science teachers in environmental and earth science to strengthen environmental education in schools.

(g) YES! Students Take Action to Complete Eco Projects

\$199,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Prairie Woods Environmental Learning Center, in partnership with Ney Nature Center and Laurentian Environmental Center, to empower Minnesota youth to connect with natural resource experts, identify ecological challenges, and take action to complete innovative projects in their communities.

(h) Increasing Diversity in Environmental Careers

\$500,000 the second year is from the trust fund to the commissioner of natural resources, in cooperation with Conservation Corps Minnesota and Iowa, to encourage a diversity of students to pursue careers in the environment and natural resources through internships, mentorships, and fellowships with the Department of Natural Resources, the Board of Water and Soil Resources, and the Pollution Control Agency.

(i) Diversity and Access to Wildlife-Related Opportunities

\$199,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to broaden the state's conservation constituency by researching diverse communities' values about nature and wildlife experiences and identifying barriers to engagement.

Subd. 6. Aquatic and Terrestrial Invasive Species-0-6,404,000**(a) Minnesota Invasive Terrestrial Plants and Pests Center**

\$6,230,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to support the Minnesota Invasive Terrestrial Plants and Pests Center to fund high-priority research projects to better manage invasive plants, pathogens, and pests on Minnesota's natural and agricultural lands. This appropriation is subject to Minnesota Statutes, section 116P.10. This appropriation is available until June 30, 2027, by which time the project must be completed and final products delivered.

(b) Purple Loosestrife Biocontrol Citizen Science Program

\$174,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Wild Rivers Conservancy to protect and restore native ecosystems by identifying purple loosestrife in priority management areas and engaging, educating, and empowering citizens to use an approved purple loosestrife biocontrol in Minnesota's St. Croix River watershed.

Subd. 7. **Air Quality and Renewable Energy** -0- 843,000

(a) Green Solar Cells from a Minnesota Natural Resource

\$673,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to develop an efficient, low cost, and nontoxic pyrite solar cell and conduct a feasibility study for using Iron Range resources to manufacture this product. This appropriation is subject to Minnesota Statutes, section 116P.10.

(b) Morris GHG Emissions Inventory and Mitigation Strategies

\$170,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Morris to conserve natural resources by conducting a greenhouse gas (GHG) emissions inventory of city and county operations as part of the Morris Model partnership, implementing policy to achieve targeted reductions, and disseminating findings. This appropriation is available until June 30, 2026, by which time the project must be completed and final products delivered.

Subd. 8. **Methods to Protect, Restore, and Enhance Land, Water, and Habitat** -0- 11,294,000

(a) Minnesota's Volunteer Rare Plant Conservation Corps

\$859,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota for the Minnesota Landscape Arboretum to partner with the Department of Natural Resources and the Minnesota Native Plant Society to establish and train a volunteer corps to survey, monitor, and bank seed from Minnesota's rare plant populations and enhance the effectiveness and efficiencies of conservation efforts.

(b) Conservation Corps Veterans Service Corps Program

\$1,339,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Conservation Corps Minnesota to create a

Veterans Service Corps program to accelerate natural resource restorations in Minnesota while providing workforce development opportunities for the state's veterans.

(c) Creating Seed Sources of Early-Blooming Plants for Pollinators

\$200,000 the second year is from the trust fund to the commissioner of natural resources to establish new populations of early-season flowers by hand-harvesting and propagating species that are currently lacking in prairie restorations and that are essential to pollinator health. This appropriation is available until June 30, 2026, by which time the project must be completed and final products delivered.

(d) Hastings Lake Rebecca Park Area

\$1,000,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Hastings to develop an ecological-based master plan for Lake Rebecca Park and to enhance habitat quality and construct passive recreational facilities consistent with the master plan. No funds for implementation may be spent until the master plan is complete.

(e) Pollinator Plantings and the Redistribution of Soil Toxins

\$610,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to map urban and suburban soil toxins of concern, such as heavy metals and microplastics, and to test whether pollinator plantings can redistribute these toxins in the soil of yards, parks, and community gardens and reduce exposure to humans and wildlife.

(f) PFAS Fungal-Wood Chip Filtering System

\$189,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to identify, develop, and field-test various types of waste wood chips and fungi to sequester and degrade PFAS leachate from contaminated waste sites. This appropriation is subject to Minnesota Statutes, section 116P.10.

(g) Phytoremediation for Extracting Deicing Salt

\$451,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to protect lands and waters from contamination by collaborating with the Department of Transportation to develop methods for using native plants to remediate roadside deicing salt.

(h) Mustinka River Fish and Wildlife Habitat Corridor Rehabilitation

\$2,692,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Bois de Sioux Watershed District to permanently rehabilitate a straightened reach of the Mustinka River to a naturally functioning stream channel and floodplain corridor for water, fish, and wildlife benefits.

(i) Bohemian Flats Savanna Restoration

\$286,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Minneapolis Park and Recreation Board to restore an area of compacted urban turf within Bohemian Flats Park and adjacent to the Mississippi River to an oak savanna ecosystem.

(j) Watershed and Forest Restoration: What a Match!

\$3,318,000 the second year is from the trust fund to the Board of Water and Soil Resources, in cooperation with soil and water conservation districts, the Mille Lacs Band of Ojibwe, and the Department of Natural Resources, to accelerate tree planting on privately owned, protected lands for water-quality protection and carbon sequestration.

(k) River Habitat Restoration and Recreation in Melrose

\$350,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Melrose to conduct habitat restoration and create fishing, canoeing, and camping opportunities along a segment of the Sauk River within the city of Melrose and to provide public education

about stream restoration, fish habitat, and the importance of natural areas.

Subd. 9. Habitat and Recreation

-0-

26,179,000

(a) Mesabi Trail: Wahlsten Road (CR 26) to Tower

\$1,307,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the St. Louis and Lake Counties Regional Railroad Authority to acquire easements, engineer, and construct a segment of the Mesabi Trail beginning at the intersection of Wahlsten Road (CR 26) and Benson Road in Embarrass and extending to Tower.

(b) Environmental Learning Classroom with Trails

\$82,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Mountain Iron-Buhl Public Schools to build an outdoor classroom pavilion, accessible trails, and a footbridge within the Mountain Iron-Buhl School Forest to conduct environmental education that cultivates a lasting conservation ethic.

(c) Local Parks, Trails, and Natural Areas Grant Programs

\$3,560,000 the second year is from the trust fund to the commissioner of natural resources to solicit, rank, and fund competitive matching grants for local parks, trail connections, and natural and scenic areas under Minnesota Statutes, section 85.019. This appropriation is for local nature-based recreation, connections to regional and state natural areas, and recreation facilities and may not be used for athletic facilities such as sport fields, courts, and playgrounds.

(d) St. Louis River Re-Connect

\$500,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Duluth to expand recreational access along the St. Louis River and estuary by implementing the St. Louis River National Water Trail outreach plan, designing and constructing upgrades and extensions to the Waabizheshikana Trail, and installing

interpretive features that describe the cultural and ecological significance of the area.

(e) Native Prairie Stewardship and Prairie Bank Easement Acquisition

\$1,353,000 the second year is from the trust fund to the commissioner of natural resources to provide technical stewardship assistance to private landowners, restore and enhance native prairie protected by easements in the native prairie bank, and acquire easements for the native prairie bank in accordance with Minnesota Statutes, section 84.96, including preparing initial baseline property assessments. Up to \$60,000 of this appropriation may be deposited in the natural resources conservation easement stewardship account created under Minnesota Statutes, section 84.69, proportional to the number of easements acquired.

(f) Minnesota State Parks and State Trails Maintenance and Development

\$1,600,000 the second year is from the trust fund to the commissioner of natural resources for maintenance and development at state parks, recreation areas, and trails to protect Minnesota's natural heritage, enhance outdoor recreation, and improve the efficiency of public land management.

(g) Minnesota State Trails Development

\$7,387,000 the second year is from the trust fund to the commissioner of natural resources to expand recreational opportunities on Minnesota state trails by rehabilitating and enhancing existing state trails and replacing or repairing existing state trail bridges.

(h) SNA Habitat Restoration and Public Engagement

\$5,000,000 the second year is from the trust fund to the commissioner of natural resources for the scientific and natural areas (SNA) program to restore and enhance exceptional habitat on SNAs and increase public involvement and outreach.

(i) The Missing Link: Gull Lake Trail, Fairview Township

\$1,394,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Fairview Township to complete the Gull Lake Trail by engineering and constructing the trail's final segment through Fairview Township in the Brainerd Lakes area.

(j) Silver Bay Multimodal Trailhead Project

\$1,000,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Silver Bay to develop a multimodal trailhead center to provide safe access to the Superior, Gitchi-Gami, and C.J. Ramstad/North Shore trails; Black Beach Park; and other recreational destinations.

(k) Brookston Campground, Boat Launch, and Outdoor Recreational Facility

\$453,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Brookston to build a campground, boat launch, and outdoor recreation area on the banks of the St. Louis River in northeastern Minnesota. Before any trust fund dollars are spent, the city must demonstrate that all funds to complete the project are secured and a fiscal agent must be approved in the work plan.

(l) Silver Lake Trail Connection

\$727,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Virginia to design, engineer, and construct a multiuse trail that will connect Silver Lake Trail to a new Miners Entertainment and Convention Center and provide lighting on Bailey Lake Trail.

(m) Floodwood Campground Improvement Project

\$816,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Floodwood to upgrade the Floodwood Campground and connecting trails to provide high-quality nature and recreation experience for people of all ages.

(n) Ranier Safe Harbor/Transient Dock - Phase 2

\$1,000,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the city of Ranier to construct a safe harbor and transient dock to accommodate watercraft of many sizes to improve public access for boat recreation on Rainy Lake. Before trust fund dollars are spent, a fiscal agent must be approved in the work plan. Before any trust fund dollars are spent, the city must demonstrate that all funds to complete the project are secured. Any revenue generated from selling products or assets developed or acquired with this appropriation must be repaid to the trust fund unless a plan is approved for reinvestment of income in the project as provided under Minnesota Statutes, section 116P.10.

Subd. 10. Other Projects

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6,973,000

(a) Aggregate Resource Mapping

\$500,000 the second year is from the trust fund to the commissioner of natural resources for continued mapping of the aggregate resource potential in the state of Minnesota and to make the information available in print and electronic format to local units of government for use in planning and zoning.

(b) Leaded Gasoline Contamination Analysis

\$200,000 the second year is from the trust fund to the commissioner of administration for a grant to the city of Paynesville to procure an analysis of the extent of leaded gasoline contamination in or near the cities of Paynesville, Foley, Alexandria, and Blaine, and of the threat posed by the contamination to each city's drinking water supply. The vendor selected to perform the analysis must use the same methodology to conduct the analysis for each city and must produce findings that are comparable between cities. The cities must work cooperatively to select a vendor. By January 15, 2024, the city administrator of the city of Paynesville must report the results of the analysis to the chairs and ranking minority members of the house of representatives and senate committees and divisions with jurisdiction over environment and natural resources.

(c) Living Snow Fence Program

\$200,000 the second year is from the trust fund to the commissioner of transportation for contracts to build and improve living snow fences consisting of trees, shrubs, native grasses, and wildflowers. Money appropriated in this paragraph may only be used to acquire and plant trees native to Minnesota. This appropriation is available until June 30, 2026.

(d) Forest Data Inventory

\$500,000 the second year is from the trust fund to the commissioner of natural resources for an enhanced forest inventory on county and private lands.

(e) Conservation Reserve Program State Incentives

\$750,000 the second year is from the trust fund to the Board of Water and Soil Resources to provide onetime state incentive payments to enrollees in the federal Conservation Reserve Program (CRP) during the continuous enrollment period and to enroll land in conservation easements consistent with Minnesota Statutes, section 103F.515. The board may establish payment rates based on land valuation and on environmental benefit criteria, including but not limited to surface water or groundwater pollution reduction, drinking water protection, soil health, pollinator and wildlife habitat, and other conservation enhancements. The board may use state funds to implement the program and to provide technical assistance to landowners or their agents to fulfill enrollment and contract provisions. The board must consult with the commissioners of agriculture, health, natural resources, and the Pollution Control Agency and the United States Department of Agriculture in establishing program criteria. This appropriation is available until June 30, 2026.

(f) Groundwater Storage and Recovery Database

\$400,000 the second year is from the trust fund to the commissioner of natural resources to complete a centralized aquifer property database to provide needed data for site characterization.

(g) Rural and Farmstead Ring Levees

\$360,000 the second year is from the trust fund to the commissioner of natural resources for grants to assist in constructing rural and farmstead ring levees for flood protection in the Red River watershed. A grant may not exceed 50 percent of the cost of the project.

(h) Replacing Failing Septic Systems to Protect Groundwater

\$2,000,000 the second year is from the trust fund to the commissioner of the Pollution Control Agency to counties for grants to low-income landowners to address septic systems that pose an imminent threat to public health or safety or fail to protect groundwater. The issuance of a loan under Minnesota Statutes, section 17.117, for the purpose of replacing a failed septic system, shall not preclude a rural landowner from obtaining a grant under this paragraph or vice versa. This appropriation is available until June 30, 2025.

(i) Forever Green

\$763,000 the second year is from the trust fund to the commissioner of agriculture for grants to the Board of Regents of the University of Minnesota to fund the Forever Green Agriculture Initiative and protect the state's natural resources while increasing the efficiency, profitability, and productivity of Minnesota farmers by incorporating perennial and winter-annual crops into existing agricultural practices.

(j) Pig's Eye Landfill Task Force

\$800,000 the second year is from the trust fund to the commissioner of the Pollution Control Agency to establish a Pig's Eye Landfill Task Force to coordinate efforts to remediate and restore the Pig's Eye Landfill Superfund site and address perfluoroalkyl and polyfluoroalkyl substances (PFAS) contamination of Battle Creek, Pig's Eye Lake, and nearby groundwater. The task force must be made up of at least the commissioner of the Pollution Control Agency, the commissioner of natural resources, the commissioner of health, a representative from the Metropolitan Council, a representative from the city of St. Paul, a representative from the city of South St. Paul, a representative from the city of Newport, a

representative from Ramsey County, a representative from Dakota County, a representative from Washington County, and representatives from relevant federal agencies. The task force is subject to Minnesota Statutes, section 15.059, subdivision 6. The task force must submit an annual report to the chairs and ranking minority members of the legislative committees and divisions with jurisdiction over the environment and natural resources on the status of the task force's work. The final report is due February 15, 2026. The task force expires June 30, 2026. This appropriation is available until June 30, 2026.

(k) Developing Markets for Continuous Living Cover Crops

\$500,000 the second year is from the trust fund to the commissioner of agriculture for grants to organizations in Minnesota to develop enterprises, supply chains, and markets for continuous living cover crops and cropping systems in the early stage of commercial development, including but not limited to regenerative poultry silvopasture systems, Kernza perennial grain, winter camelina, and elderberry.

Subd. 11. Administrative

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132,000

\$132,000 the second year is from the trust fund to the commissioner of natural resources, at the direction of the Legislative-Citizen Commission on Minnesota Resources, for expenses incurred in preparing and administering contracts, including for the agreements specified in this section.

Subd. 12. Availability of Appropriations

Money appropriated in this section may not be spent on activities unless they are directly related to and necessary for a specific appropriation and are specified in the work plan approved by the Legislative-Citizen Commission on Minnesota Resources. Money appropriated in this section must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for a specific appropriation. Costs that are directly related to and necessary for an appropriation, including financial services, human resources, information services, rent, and utilities, are eligible only if the costs

can be clearly justified and individually documented specific to the appropriation's purpose and would not be generated by the recipient but for receipt of the appropriation. No broad allocations for costs in either dollars or percentages are allowed. Unless otherwise provided, the amounts in this section are available for three years beginning July 1, 2022, and ending June 30, 2025, when projects must be completed and final products delivered. For acquisition of real property, the appropriations in this section are available for an additional fiscal year if a binding contract for acquisition of the real property is entered into before the expiration date of the appropriation. If a project receives a federal award, the period of the appropriation is extended to equal the federal award period to a maximum trust fund appropriation length of six years.

Subd. 13. Data Availability Requirements Data

Data collected by the projects funded under this section must conform to guidelines and standards adopted by Minnesota IT Services. Spatial data must also conform to additional guidelines and standards designed to support data coordination and distribution that have been published by the Minnesota Geospatial Information Office. Descriptions of spatial data must be prepared as specified in the state's geographic metadata guideline and must be submitted to the Minnesota Geospatial Information Office. All data must be accessible and free to the public unless made private under the Data Practices Act, Minnesota Statutes, chapter 13. To the extent practicable, summary data and results of projects funded under this section should be readily accessible on the Internet and identified as having received funding from the environment and natural resources trust fund.

Subd. 14. Project Requirements

(a) As a condition of accepting an appropriation under this section, an agency or entity receiving an appropriation or a party to an agreement from an appropriation must comply with paragraphs (b) to (l) and Minnesota Statutes, chapter 116P, and must submit a work plan and annual or semiannual progress reports in the form determined by the Legislative-Citizen Commission on Minnesota Resources for any project

funded in whole or in part with funds from the appropriation. Modifications to the approved work plan and budget expenditures must be made through the amendment process established by the Legislative-Citizen Commission on Minnesota Resources.

(b) A recipient of money appropriated in this section that conducts a restoration using funds appropriated in this section must use native plant species according to the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines and include an appropriate diversity of native species selected to provide habitat for pollinators throughout the growing season as required under Minnesota Statutes, section 84.973.

(c) For all restorations conducted with money appropriated under this section, a recipient must prepare an ecological restoration and management plan that, to the degree practicable, is consistent with the highest-quality conservation and ecological goals for the restoration site. Consideration should be given to soil, geology, topography, and other relevant factors that would provide the best chance for long-term success and durability of the restoration project. The plan must include the proposed timetable for implementing the restoration, including site preparation, establishment of diverse plant species, maintenance, and additional enhancement to establish the restoration; identify long-term maintenance and management needs of the restoration and how the maintenance, management, and enhancement will be financed; and take advantage of the best-available science and include innovative techniques to achieve the best restoration.

(d) An entity receiving an appropriation in this section for restoration activities must provide an initial restoration evaluation at the completion of the appropriation and an evaluation three years after the completion of the expenditure. Restorations must be evaluated relative to the stated goals and standards in the restoration plan, current science, and, when applicable, the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines. The evaluation must determine whether the restorations are meeting planned goals, identify any problems with implementing the restorations, and,

if necessary, give recommendations on improving restorations. The evaluation must be focused on improving future restorations.

(e) All restoration and enhancement projects funded with money appropriated in this section must be on land permanently protected by a conservation easement or public ownership.

(f) A recipient of money from an appropriation under this section must give consideration to contracting with Conservation Corps Minnesota for contract restoration and enhancement services.

(g) All conservation easements acquired with money appropriated under this section must:

(1) be permanent;

(2) specify the parties to an easement in the easement;

(3) specify all provisions of an agreement that are permanent;

(4) be sent to the Legislative-Citizen Commission on Minnesota Resources in an electronic format at least ten business days before closing;

(5) include a long-term monitoring and enforcement plan and funding for monitoring and enforcing the easement agreement; and

(6) include requirements in the easement document to protect the quantity and quality of groundwater and surface water through specific activities such as keeping water on the landscape, reducing nutrient and contaminant loading, and not permitting artificial hydrological modifications.

(h) For any acquisition of lands or interest in lands, a recipient of money appropriated under this section must not agree to pay more than 100 percent of the appraised value for a parcel of land using this money to complete the purchase, in part or in whole, except that up to ten percent above the appraised value may be allowed to complete the purchase, in part or in whole, using this money if permission is received in advance of the purchase from the Legislative-Citizen Commission on Minnesota Resources.

(i) For any acquisition of land or interest in land, a recipient of money appropriated under this section

must give priority to high-quality natural resources or conservation lands that provide natural buffers to water resources.

(j) For new lands acquired with money appropriated under this section, a recipient must prepare an ecological restoration and management plan in compliance with paragraph (c), including sufficient funding for implementation unless the work plan addresses why a portion of the money is not necessary to achieve a high-quality restoration.

(k) To ensure public accountability for using public funds, a recipient of money appropriated under this section must, within 60 days of the transaction, provide to the Legislative-Citizen Commission on Minnesota Resources documentation of the selection process used to identify parcels acquired and provide documentation of all related transaction costs, including but not limited to appraisals, legal fees, recording fees, commissions, other similar costs, and donations. This information must be provided for all parties involved in the transaction. The recipient must also report to the Legislative-Citizen Commission on Minnesota Resources any difference between the acquisition amount paid to the seller and the state-certified or state-reviewed appraisal, if a state-certified or state-reviewed appraisal was conducted.

(l) A recipient of an appropriation from the trust fund under this section must acknowledge financial support from the environment and natural resources trust fund in project publications, signage, and other public communications and outreach related to work completed using the appropriation. Acknowledgment may occur, as appropriate, through use of the trust fund logo or inclusion of language attributing support from the trust fund. Each direct recipient of money appropriated in this section, as well as each recipient of a grant awarded pursuant to this section, must satisfy all reporting and other requirements incumbent upon constitutionally dedicated funding recipients as provided in Minnesota Statutes, section 3.303, subdivision 10, and chapter 116P.

(m) A recipient of an appropriation from the trust fund under this section that is receiving funding to conduct children's services, as defined in Minnesota Statutes, section 299C.61, subdivision 7, must certify to the

Legislative-Citizen Commission on Minnesota Resources, as part of the required work plan, that criminal background checks for background check crimes, as defined in Minnesota Statutes, section 299C.61, subdivision 2, are performed on all employees, contractors, and volunteers that have or may have access to a child to whom the recipient provides children's services using the appropriation.

Subd. 15. Payment Conditions and Capital Equipment Expenditures

(a) All agreements, grants, or contracts referred to in this section must be administered on a reimbursement basis unless otherwise provided in this section. Notwithstanding Minnesota Statutes, section 16A.41, expenditures made on or after July 1, 2022, or the date the work plan is approved, whichever is later, are eligible for reimbursement unless otherwise provided in this section. Periodic payments must be made upon receiving documentation that the deliverable items articulated in the approved work plan have been achieved, including partial achievements as evidenced by approved progress reports. Reasonable amounts may be advanced to projects to accommodate cash-flow needs or match federal money. The advances must be approved as part of the work plan. No expenditures for capital equipment are allowed unless expressly authorized in the project work plan.

(b) Single-source contracts as specified in the approved work plan are allowed.

Subd. 16. Purchasing Recycled and Recyclable Materials

A political subdivision, public or private corporation, or other entity that receives an appropriation under this section must use the appropriation in compliance with Minnesota Statutes, section 16C.0725, regarding purchasing recycled, repairable, and durable materials, and Minnesota Statutes, section 16C.073, regarding purchasing and using paper stock and printing.

Subd. 17. Energy Conservation and Sustainable Building Guidelines

A recipient to whom an appropriation is made under this section for a capital improvement project must ensure that the project complies with the applicable

energy conservation and sustainable building guidelines and standards contained in law, including Minnesota Statutes, sections 16B.325, 216C.19, and 216C.20, and rules adopted under those sections. The recipient may use the energy planning, advocacy, and State Energy Office units of the Department of Commerce to obtain information and technical assistance on energy conservation and alternative-energy development relating to planning and constructing the capital improvement project.

Subd. 18. Accessibility

Structural and nonstructural facilities must meet the design standards in the Americans with Disabilities Act (ADA) accessibility guidelines.

Subd. 19. Carryforward; Extensions

(a) The availability of the appropriations for the following projects is extended to June 30, 2024:

(1) Laws 2019, First Special Session chapter 4, article 2, section 2, subdivision 8, paragraph (a), Saving Endangered Pollinators through Data-Driven Prairie Restoration; and

(2) Laws 2019, First Special Session chapter 4, article 2, section 2, subdivision 9, paragraph (e), National Loon Center.

(b) The availability of the transfers for the following projects is extended to June 30, 2024:

(1) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 20, paragraph (a), clause (1), for the Unprecedented Change Threatens Minnesota's Pristine Lakes project;

(2) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 20, paragraph (a), clause (2), for the Wastewater Pond Optimization project;

(3) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 20, paragraph (a), clause (3), for the Applied Research in State Mineral and Water Resources project;

(4) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 20, paragraph (a), clause (4), for the Chloride Pollution Reduction project;

(5) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 20, paragraph (a), clause (5), for the CWD Prion Research in Soils project;

(6) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 20, paragraph (b), clauses (1) and (2), Lawns to Legumes;

(7) Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 20, paragraph (c), clauses (1) to (8), Emerging Issues Account; and

(8) Laws 2021, First Special Session chapter 6, article 6, section 2, subdivision 19, paragraph (a), clauses (1) to (4), for the Forest Health Research, Development and Demonstration project at the Natural Resources Research Institute.

(c) Notwithstanding Minnesota Statutes, section 16A.28, or any other law to the contrary, the availability of any appropriation or grant of money from the environment and natural resources trust fund that would otherwise cancel, lapse, or expire on June 30, 2022, is extended to June 30, 2023, if the recipient or grantee:

(1) by June 15, 2022, notifies the Legislative-Citizen Commission on Minnesota Resources in the manner specified by the commission that the recipient or grantee intends to avail itself of the extension available under this subdivision; and

(2) modifies the applicable work plan where required by Minnesota Statutes, section 116P.05, subdivision 2, in accordance with the work plan amendment procedures adopted under that section.

(d) The commission must notify the commissioner of management and budget and the commissioner of natural resources of any extension granted under paragraph (c).

Subd. 20. Transfers

(a) The following amounts, estimated to be \$2,183,000, are transferred to the commissioner of natural resources for maintenance and development at state parks, recreation areas, and trails to protect Minnesota's natural heritage, enhance outdoor recreation, and improve the efficiency of public land management:

(1) the unencumbered amount, estimated to be \$925,000, in Laws 2017, chapter 96, section 2, subdivision 7, paragraph (d), District Heating with Renewable Biomass at Camp Ripley Training Center;

(2) the unencumbered amount, estimated to be \$910,000, in Laws 2017, chapter 96, section 2, subdivision 9, paragraph (e), as amended by Laws 2019, First Special Session chapter 4, article 2, section 4, Native Prairie Stewardship and Prairie Bank Easement Acquisition; and

(3) \$348,000 of the unencumbered amount, estimated to be \$550,000, in Laws 2018, chapter 214, section 2, subdivision 9, paragraph (d), Mississippi Blufflands State Trail - Red Wing Barn Bluff to Colvill Park Segment.

(b) The remainder of the unencumbered amount in Laws 2018, chapter 214, section 2, subdivision 9, paragraph (d), not transferred under paragraph (a), clause (3), estimated to be \$202,000, is transferred to an emerging issues account authorized in Minnesota Statutes, section 116P.08, subdivision 4, paragraph (d).

(c) \$78,000 is transferred from the amount appropriated under Laws 2021, First Special Session chapter 6, article 5, section 2, subdivision 4, paragraph (b), to the appropriation in subdivision 11. The commissioner must provide documentation to the Legislative-Citizen Commission on Minnesota Resources on the expenditure of these funds.

(d) The amounts transferred under this subdivision are available until June 30, 2025.

EFFECTIVE DATE. Subdivision 19 is effective the day following final enactment. Subdivision 20 is effective June 29, 2022.

Sec. 3. Minnesota Statutes 2020, section 116P.08, subdivision 2, is amended to read:

Subd. 2. **Exceptions.** Money from the trust fund may not be spent for:

(1) purposes of environmental compensation and liability under chapter 115B and response actions under chapter 115C;

(2) purposes of municipal water pollution control in municipalities with a population of 5,000 or more under the authority of chapters 115 and 116;

(3) costs associated with the decommissioning of nuclear power plants;

- (4) hazardous waste disposal facilities;
- (5) solid waste disposal facilities; ~~or~~
- (6) projects or purposes inconsistent with the strategic plan; or
- (7) acquiring property by eminent domain, unless the owner requests that the owner's property be acquired by eminent domain.

Sec. 4. **INFORMATION SUBMITTED WITH CAPITAL PROJECT PROPOSALS.**

The Legislative Citizen Commission on Minnesota Resources must consider whether statutorily requiring additional information to accompany proposals for capital projects would help the commission better evaluate those proposals. By October 15, 2022, the commission must submit its report and recommendations, along with any proposed statutory changes, to the chairs and ranking minority members of the house of representatives and senate committees and divisions with jurisdiction over environment and natural resources.

Presented to the governor May 24, 2022

Signed by the governor June 3, 2022, 1:05 p.m.